

Natural Gas Monthly

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Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

Contents

	Page
Highlights	1
Appendices	
A. Explanatory Notes	73
B. Data Sources	81
C. Statistical Considerations	87
D. Natural Gas Reports and Feature Articles	93
E. Technical Contacts	97
F. Natural Gas Electronic Products	99
Glossary	103

Tables

	Page
1. Summary of Natural Gas Production in the United States, 1992-1998	7
2. Supply and Disposition of Dry Natural Gas in the United States, 1992-1998	8
3. Natural Gas Consumption in the United States, 1992-1998	10
4. Selected National Average Natural Gas Prices, 1992-1998	12
5. U.S. Natural Gas Imports, by Country, 1992-1998	14
6. U.S. Natural Gas Exports, by Country, 1992-1998	15
7. Marketed Production of Natural Gas, by State, 1992-1998	16
8. Gross Withdrawals and Marketed Production of Natural Gas by State, August 1998	19
9. Underground Natural Gas Storage - All Operators, 1992-1998	20
10. Underground Natural Gas Storage - by Season, 1995-1998	22
11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1996-1998	23
12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1996-1998	24
13. Net Withdrawals from Underground Storage, by State, 1996-1998	25
14. Activities of Underground Natural Gas Storage Operators, by State, October 1998	29
15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998	30
16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998	34
17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998	38
18. Natural Gas Deliveries to Electric Utility Consumers, by State, 1996-1998	42
19. Natural Gas Deliveries to All Consumers, by State, 1996-1998	46
20. Average City Gate Price, by State, 1996-1998	50
21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998	53
22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998	56
23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998	59
24. Average Price of Natural Gas Delivered to Electric Utility Consumers, by State, 1996-1998	62

25.	Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998	65
26.	Gas Home Customer-Weighted Heating Degree Days	72
A1.	Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data	73
C1.	Standard Error for Natural Gas Deliveries and Price to Consumers by State, September 1998 . . .	91

Illustrations

	Page
1. Production and Consumption of Natural Gas in the United States, 1995-1999	9
2. Natural Gas Deliveries to Consumers in the United States, 1994-1998	11
3. Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998	13
4. Average Price of Natural Gas in the United States, 1994-1998	13
5. Underground Natural Gas Storage in the United States, 1995-1998	21
6. Percentage of Total Deliveries Represented by Onsystem Sales, 1994-1998	71

Highlights

Overview

In this issue of the *Natural Gas Monthly*, preliminary estimates are available for the full year 1998 at the national level for natural gas production, storage, imports, and end-use consumption in most sectors. Highlights of the data contained in this issue are:

- End-use consumption of natural gas in 1998 is estimated to be 19.4 trillion cubic feet, 3 percent lower than the record-breaking level set in 1997.
- Warmer-than-normal temperatures early in the 1998-99 heating season (November through March) have resulted in lower demand for natural gas and higher amounts of working gas left in storage. Working gas is estimated to be 2.8 trillion cubic feet at the end of December 1998, a level not seen since the end of 1991.
- Dry natural gas production in 1998 is estimated to be 18.9 trillion cubic feet, essentially the same as in 1997 and nearly 1 percent more than in 1996.
- Ample supplies have contributed to generally lower natural gas prices both at the wellhead and for the end-use sectors in 1998. The cumulative average wellhead price for the first three quarters of 1998 is estimated to be \$1.90 per thousand cubic feet, 14 percent lower than in 1997.

Supply

The 1998-99 heating season began with 3,172 billion cubic feet of working gas reported in underground storage facilities (Table 10), the highest initial level for a heating season since 1992. There were 8 percent fewer heating degree days than normal (Table 26) during November 1998, leading to lower-than-expected demand for natural gas for space heating during the month. Net storage withdrawals during November 1998 are estimated to be very small, only 20 billion cubic feet, 89 percent lower than in November 1997 when the weather was colder than normal. In December 1998, the average temperature for the month continued to be warmer than normal, and net withdrawals are estimated to be 320 billion cubic feet. This lower demand, together with production levels comparable to last year, resulted in more than 2,832 billion cubic feet of working gas remain-

ing in storage at the end of 1998. The last time that working gas was near this level at the end of December was in 1991 when it reached 2,824 billion cubic feet.

Natural gas production in 1998 is estimated to be 18,949 billion cubic feet, essentially the same as the 1997 level of 18,902 billion cubic feet and about 1 percent more than the 1996 level (Figure HI1 and Table 1). Production in December 1998 is estimated to be 1,622 billion cubic feet, or 52.3 billion cubic feet per day. This daily rate is about the same as during the previous month but 3 percent higher than in December 1997.

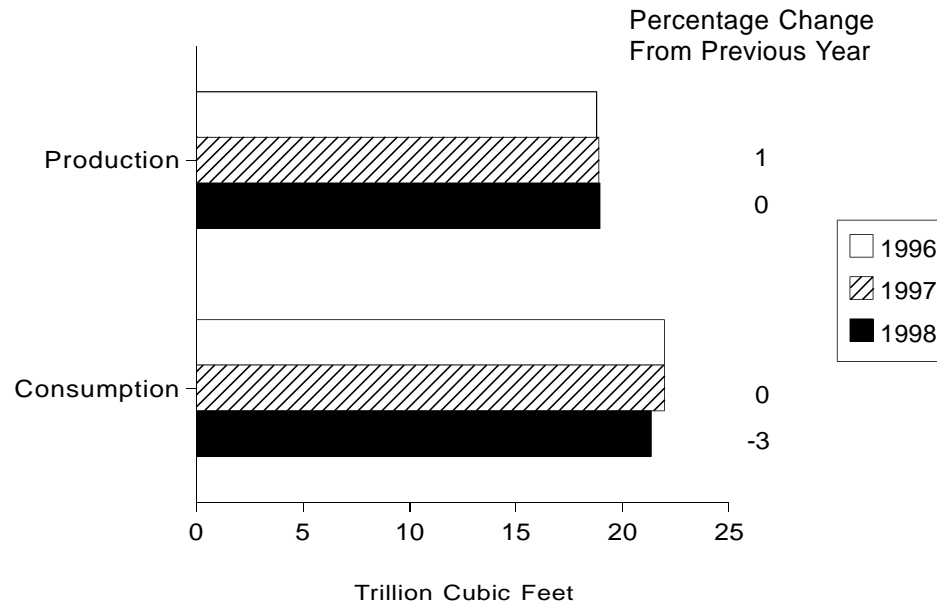
During 1998, estimates of net imports of natural gas were higher than the volumes reported for last year. The increase was greater in the latter half of the year compared with earlier months. Cumulatively from January through June, net imports in 1998 were 3 percent above those in 1997, while from July to December, they were 8 percent higher. Net imports during December 1998 are estimated to be 261 billion cubic feet, or 8.4 billion cubic feet per day (Table 2). This level is 6 percent higher than the daily rate during December 1997.

End-Use Consumption

End-use natural gas consumption is estimated to be 19,391 billion cubic feet in 1998. This level is 3 percent lower than in 1997, but consumption in both 1997 and 1996 had set all-time records at just over 20,000 billion cubic feet. The largest decline in natural gas consumption during 1998, in both quantity and percentage terms, occurred in the residential sector. Temperatures during the heating season months (January, February, March, November, and December) were generally warmer in 1998 than in 1997, reducing the demand for natural gas by residential consumers to meet space heating needs. Residential consumption of natural gas in 1998 is estimated to be 4,556 billion cubic feet, 428 billion cubic feet (9 percent) lower than in 1997 (Figure HI3 and Table 3).

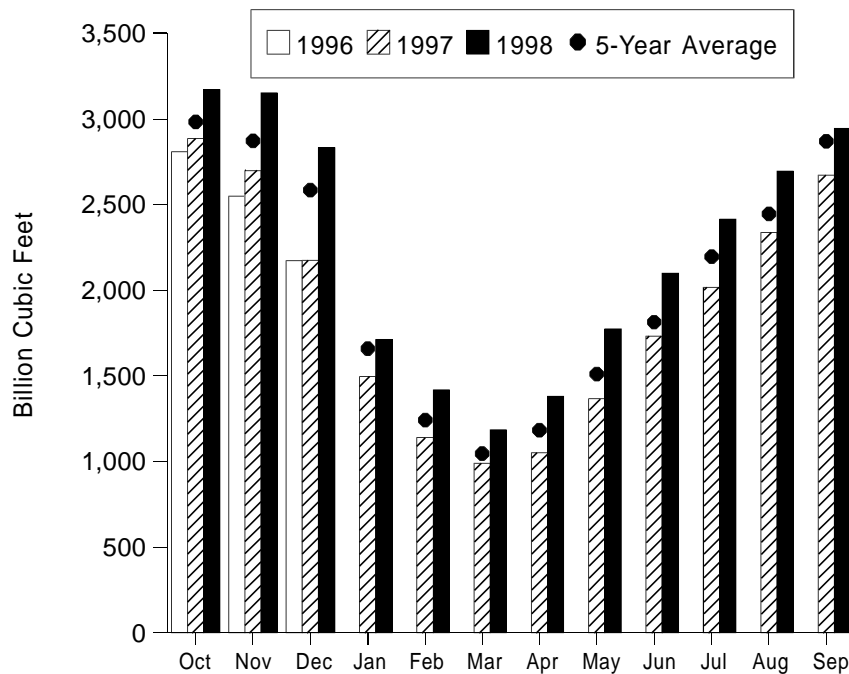
The industrial sector saw the second-largest drop in natural gas consumption between 1997 and 1998, falling by 350 billion cubic feet (4 percent) to an estimated 8,493 billion cubic feet. In the commercial sector, consumption fell by 144 billion cubic feet (4 percent) in 1998 to 3,079 billion cubic feet. Warmer weather also played a role in the decline in this sector.

Figure HI1. Natural Gas Production and Consumption, January-December, 1996-1998



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1996-1998



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Monthly estimates of natural gas consumption by electric utilities are available through September 1998. Cumulatively for the first three quarters of the year, electric utility consumption of natural gas is 301 billion cubic feet (13 percent) higher than for the same period in 1997. Exceedingly hot temperatures in the Southwest during the summer boosted the demand for electric-powered air conditioning and much of this peak demand was met by natural gas.

Prices

Average natural gas prices for the first three quarters of 1998 (through August for electric utilities) are estimated to be lower than those of 1997 at the wellhead, the city gate, and for the end-use customer classes (Figure HII4)¹. Cumulatively for January through September, the national average wellhead price is estimated to be \$1.90 per thousand cubic feet in 1998, 14 percent below that of 1997 (Table 4). For natural gas delivered to the city gate, the cumulative average price is estimated to be \$3.15 per thousand cubic feet, 11 percent below that of 1997 for the same period. Cumulative average prices declined in all the end-use sectors between 1997 and 1998. The estimated price declines are 1 percent for the residential sector, 4 percent for the commercial sector, and 9 percent for the industrial sector. In the electric utility sector, the

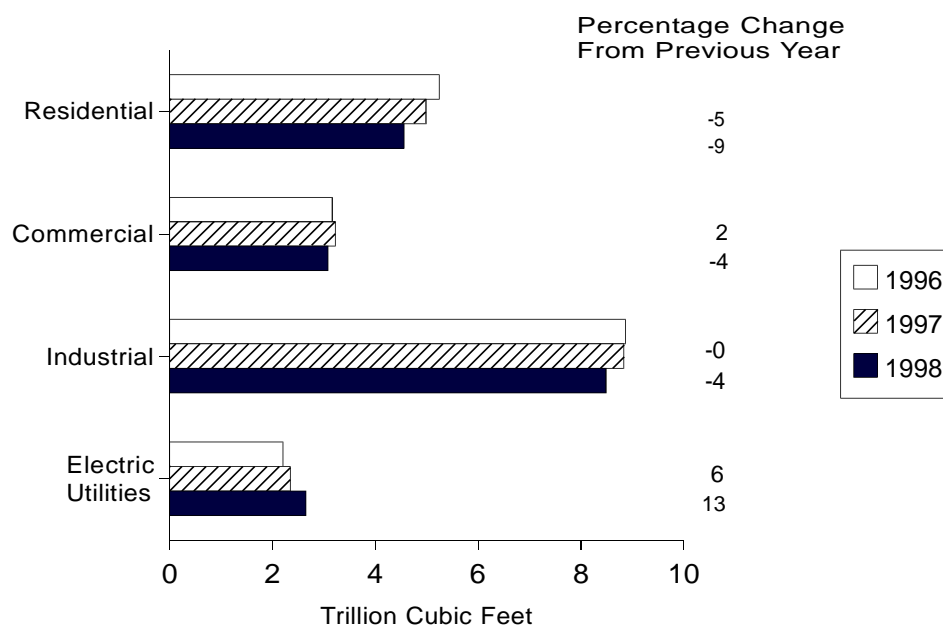
average price paid for natural gas is estimated to be \$2.44 for January through August 1998, 6 percent lower than the 1997 average.

Ample supplies and warmer-than-normal weather from mid-November through early December 1998 have prevented the sharp rise in both natural gas spot and futures prices at the Henry Hub that typically occurs early in the heating season. Both spot and futures prices have been below \$3.00 per million Btu from November 2 through December 24, 1998 (Figure HI5). The highest futures settlement price during this period was \$2.553 per million Btu on November 5 and 6 (for the December contract), while the lowest was \$1.840 on December 10 (for the January contract). The daily average spot price actually plunged to \$1.01 per million Btu by December 4, having reached a high for the period of \$2.34 on November 11. In contrast, the futures settlement price in late 1996 rose from roughly \$2.600 per million Btu in early November to a peak of \$4.573 on December 20. The futures price was above \$3.00 from mid-November through late December in 1996.

The pattern of futures prices in the second half of 1997 was unusual in that coal supply problems in the Southwest spurred demand for natural gas causing futures prices to rise above \$3.00 per million Btu in late September. The futures price generally declined in both November and December 1997. Futures prices in late 1998 are below those of 1997.

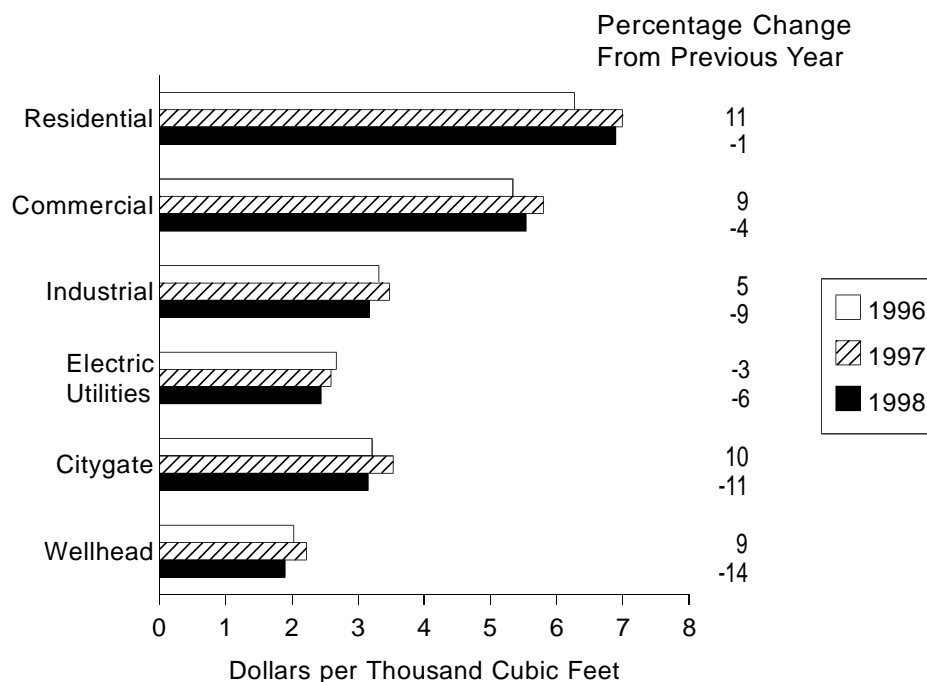
¹End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1998 they have been from 47 to 72 percent of commercial deliveries and only 13 to 17 percent of industrial deliveries (Table 4).

Figure HI3. Natural Gas Delivered to Consumers, January-December, 1996-1998



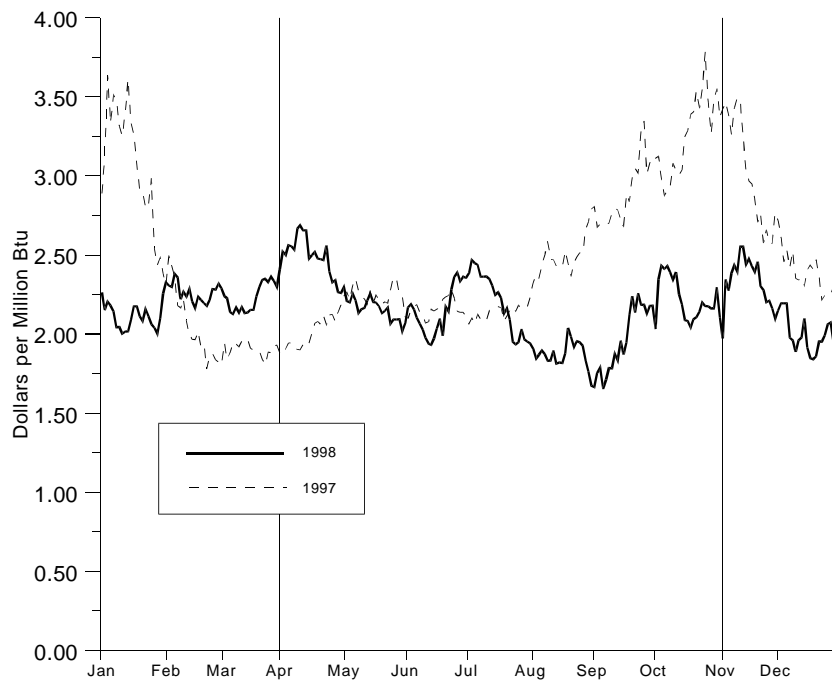
Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-September 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

Table 1. Summary of Natural Gas Production in the United States, 1992-1998
(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production (Wet)	Extraction Loss ^b	Dry Gas Production ^c
1992 Total	22,132	2,973	280	168	18,712	872	17,840
1993 Total	22,726	3,103	414	227	18,982	886	18,095
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996							
January	2,052	310	44	26	1,673	81	1,591
February	1,941	294	41	24	1,580	77	1,504
March	2,054	313	45	23	1,674	81	1,592
April	2,003	289	42	22	1,650	80	1,570
May	2,025	281	42	23	1,679	81	1,598
June	1,962	276	36	16	1,634	79	1,555
July	2,008	271	42	24	1,672	81	1,591
August	2,021	281	45	24	1,671	81	1,590
September	1,958	283	44	22	1,609	78	1,531
October	2,011	306	44	23	1,638	79	1,558
November	1,984	299	47	23	1,615	78	1,537
December	2,032	307	46	23	1,656	80	1,576
Total	24,052	3,510	518	272	19,751	958	18,793
1997							
January	2,089	305	50	25	1,709	83	1,626
February	1,905	289	46	22	1,549	75	1,474
March	2,103	311	51	23	1,720	83	1,636
April	1,993	285	48	22	1,639	80	1,559
May	2,041	268	50	22	1,702	83	1,619
June	1,952	275	47	18	1,612	78	1,534
July	2,020	272	51	23	1,674	81	1,593
August	2,022	279	52	21	1,671	81	1,590
September	1,988	285	50	21	1,632	79	1,553
October	2,057	307	51	20	1,678	81	1,597
November	1,999	302	52	19	1,626	79	1,547
December	2,044	314	52	22	1,655	80	1,575
Total	24,213	3,492	599	256	19,866	964	18,902
1998							
January	^E 2,096	^E 331	^E 46	^E 22	^E 1,697	^E 82	^E 1,615
February	^E 1,913	^E 293	^E 42	^E 19	^E 1,560	^E 76	^E 1,484
March	^E 2,086	^E 320	^E 45	^E 22	^E 1,699	^E 82	^E 1,617
April	^{RE} 1,998	^{RE} 306	^E 44	^{RE} 21	^{RE} 1,628	^E 79	^{RE} 1,549
May	^{RE} 2,061	^{RE} 317	^E 43	^E 20	^{RE} 1,681	^{RE} 82	^{RE} 1,599
June	^{RE} 1,996	^{RE} 294	^E 44	^E 22	^{RE} 1,637	^E 79	^{RE} 1,557
July	^{RE} 2,029	^{RE} 295	^{RE} 45	^{RE} 24	^{RE} 1,665	^E 81	^{RE} 1,585
August	^{RE} 2,048	^{RE} 296	^{RE} 45	^{RE} 23	^{RE} 1,684	^E 82	^E 1,603
September	^{RE} 1,997	^{RE} 291	^{RE} 44	^{RE} 22	^E 1,640	^E 80	^E 1,560
October	^E 2,037	^E 296	^E 45	^E 23	^E 1,673	^E 81	^E 1,592
November(STIFS)	NA	NA	NA	NA	^E 1,647	^E 80	^E 1,567
December(STIFS)	NA	NA	NA	NA	^E 1,705	^E 83	^E 1,622
Total	NA	NA	NA	NA	^E 19,916	^E 966	^E 18,949

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^b Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Equal to marketed production (wet) minus extraction loss.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*. January 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1992-1998
(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels ^a	Net Imports	Net Storage Withdrawals ^b	Balancing Item ^c	Consumption ^d
1992 Total	17,840	118	1,921	173	-508	19,544
1993 Total	18,095	119	2,210	-36	-110	20,279
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996						
January	1,591	12	249	723	-2	2,574
February	1,504	11	221	462	138	2,335
March	1,592	11	226	333	46	2,209
April	1,570	9	227	-119	139	1,826
May	1,598	6	244	-339	67	1,576
June	1,555	8	214	-388	65	1,454
July	1,591	8	222	-382	-3	1,436
August	1,590	8	221	-358	4	1,465
September	1,531	8	227	-379	12	1,399
October	1,558	9	236	-210	-62	1,531
November	1,537	10	238	272	-161	1,896
December	1,576	10	259	387	35	2,266
Total	18,793	109	2,784	2	279	21,967
1997						
January	1,626	12	266	709	-90	2,523
February	1,474	10	228	371	170	2,253
March	1,636	9	241	160	69	2,115
April	1,559	8	224	-61	64	1,795
May	1,619	8	232	-333	62	1,588
June	1,534	6	223	-379	67	1,451
July	1,593	7	225	-293	5	1,537
August	1,590	8	227	-334	28	1,518
September	1,553	6	226	-349	3	1,440
October	1,597	8	239	-218	-92	1,534
November	1,547	10	259	196	-116	1,895
December	1,575	11	246	553	-68	2,317
Total	18,902	103	2,837	24	106	21,972
1998						
January	^E 1,615	^E 12	267	466	^R 50	^R 2,410
February	^E 1,484	^E 10	237	299	^R 78	^R 2,108
March	^E 1,617	^E 11	244	241	^R 18	^R 2,131
April	^{RE} 1,549	^E 9	235	-198	111	^R 1,706
May	^{RE} 1,599	^E 8	240	-393	^R 60	^R 1,514
June	^{RE} 1,557	^E 7	236	-323	^R -6	^R 1,472
July	^{RE} 1,585	^E 9	^{RE} 252	-314	^R 42	^R 1,574
August	^E 1,603	^E 9	^{RE} 245	-283	^R 6	^R 1,579
September	^E 1,560	^E 9	^{RE} 254	-227	^R -120	1,478
October	^E 1,592	^E 10	^E 261	-255	-121	^E 1,488
November(STIFS)	^E 1,567	^E 11	^E 256	^{RE} 20	^{RE} -99	^E 1,755
December(STIFS)	^E 1,622	^E 13	^E 261	^E 320	^E -63	^E 2,152
Total	^E 18,949	^E 118	^E 2,987	^E -646	^E -43	^E 21,366

^a Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0025 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

^b Monthly and annual data for 1991 through 1996 include underground storage and liquefied natural gas storage. Data for January 1997 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

^c Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

^d Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

^R = Revised Data.

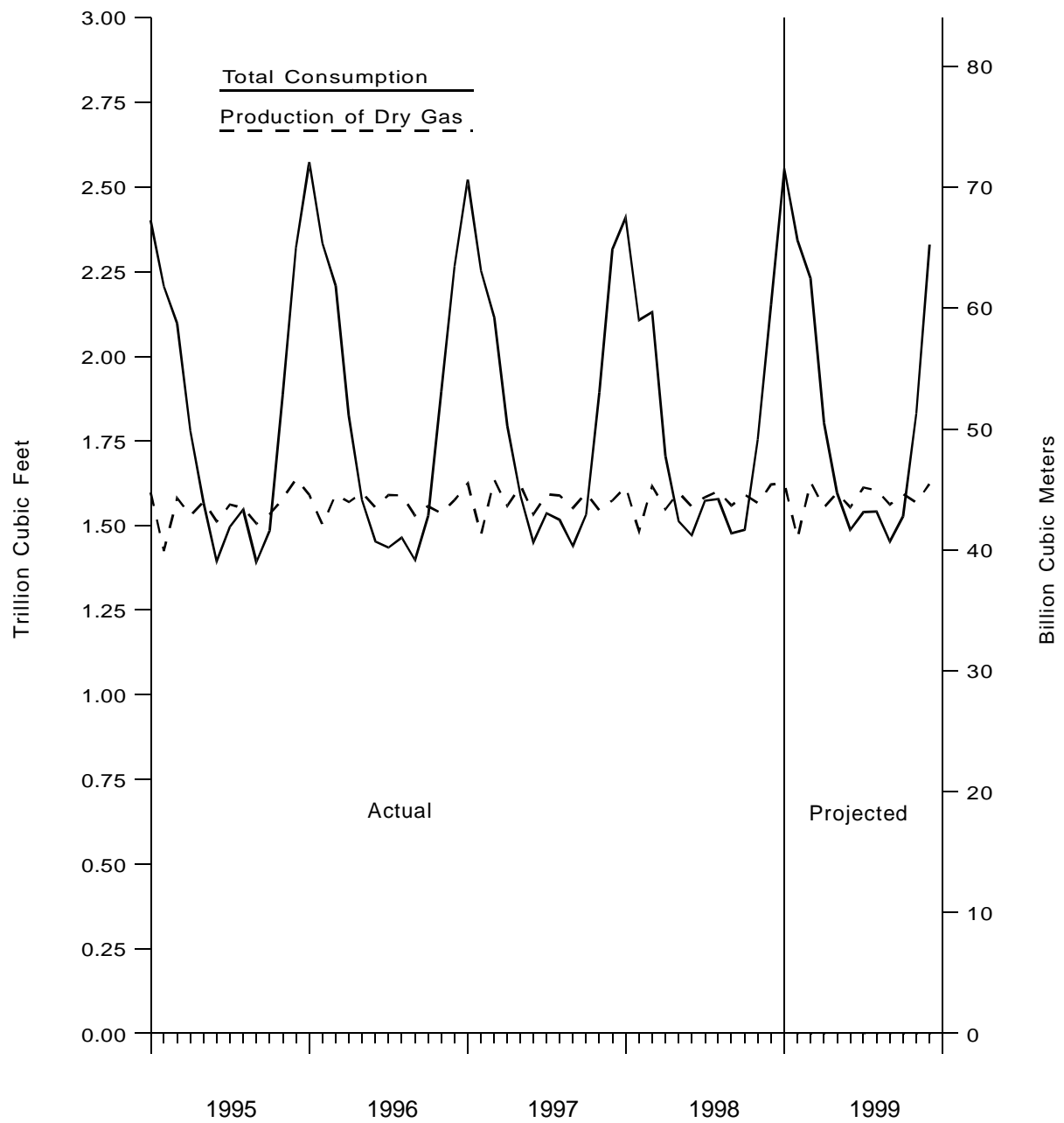
^E = Estimated Data.

^{RE} = Revised Estimated Data.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*, 1994-1995: EIA: Form EIA-627, "Annual Quantity and Value of Natural Gas Report" (1995 data only), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, "Monthly Underground Gas Storage Report," Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," EIA computations and *Natural Gas Annual 1996*. January 1997 through current month: EIA, Form EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1995-1999



Sources: 1995 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook* (October 1997).

Table 3. Natural Gas Consumption in the United States, 1992-1998
(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel ^a	Pipeline Fuel ^b	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1992 Total	1,171	588	4,690	^c 2,803	7,527	2,766	17,786	19,544
1993 Total	1,172	624	4,956	^c 2,863	7,981	2,682	18,483	20,279
1994 Total	1,124	685	4,848	^c 2,897	8,167	2,987	18,899	20,708
1995 Total	1,220	700	4,850	^c 3,034	8,580	3,197	19,660	21,581
1996								
January	106	85	934	480	800	168	2,382	2,574
February	101	77	831	443	747	137	2,158	2,335
March	106	72	705	387	781	156	2,030	2,209
April	104	59	474	284	736	170	1,663	1,826
May	106	50	271	183	701	264	1,420	1,576
June	102	46	162	133	710	299	1,305	1,454
July	105	46	124	126	677	358	1,285	1,436
August	105	47	118	123	704	367	1,312	1,465
September	102	45	138	124	706	285	1,253	1,399
October	104	49	243	171	737	226	1,378	1,531
November	103	62	503	295	764	170	1,732	1,896
December	105	74	738	409	807	132	2,086	2,266
Total	1,250	711	5,241	^c 3,161	8,870	2,732	20,006	21,967
1997								
January	104	88	902	475	816	139	2,332	2,523
February	94	78	757	421	759	143	2,081	2,253
March	104	73	606	360	782	190	1,938	2,115
April	99	61	433	270	739	193	1,635	1,795
May	102	54	284	204	713	232	1,432	1,588
June	97	49	164	154	690	297	1,305	1,451
July	101	52	128	144	683	429	1,385	1,537
August	101	51	118	140	717	391	1,366	1,518
September	99	49	129	142	689	333	1,293	1,440
October	102	52	234	190	711	244	1,380	1,534
November	99	65	497	306	748	180	1,731	1,895
December	101	81	731	411	796	197	2,135	2,317
Total	1,202	752	4,984	3,223	8,843	2,968	20,018	21,972
1998								
January	^E 106	82	^R 803	^R 447	^R 800	171	^R 2,221	^R 2,410
February	^E 98	72	^R 683	^R 390	^R 731	134	^R 1,938	^R 2,108
March	^E 106	73	^R 639	369	^R 750	194	^R 1,952	^R 2,131
April	^E 102	58	^R 407	254	^R 695	190	^R 1,546	^R 1,706
May	^E 105	52	^R 220	175	^R 669	293	^R 1,357	^R 1,514
June	^E 102	50	152	^R 143	^R 644	379	^R 1,319	^R 1,472
July	^{RE} 104	54	^R 129	^R 153	^R 684	449	^R 1,416	^R 1,574
August	^E 105	54	^R 116	^R 160	686	458	^R 1,419	^R 1,579
September	^E 103	51	120	159	666	380	1,325	1,478
October(STIFS)	^E 104	^E 51	^E 218	^E 175	^E 703	NA	^E 1,332	^E 1,488
November(STIFS)	^E 103	^E 60	^E 413	^E 266	^E 722	NA	^E 1,592	^E 1,755
December(STIFS)	^E 107	^E 72	^E 655	^E 389	^E 742	NA	^E 1,974	^E 2,152
Total	^E 1,246	^E 729	^E 4,556	^E 3,079	^E 8,493	—	^E 19,391	^E 21,366

^a Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^b Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption (excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Vehicle fuel deliveries, in billion cubic feet, were 0.4 in 1991, 0.5 in 1992, 1.0 in 1993, 1.7 in 1994, 2.7 in 1995 and 2.9 in 1996.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

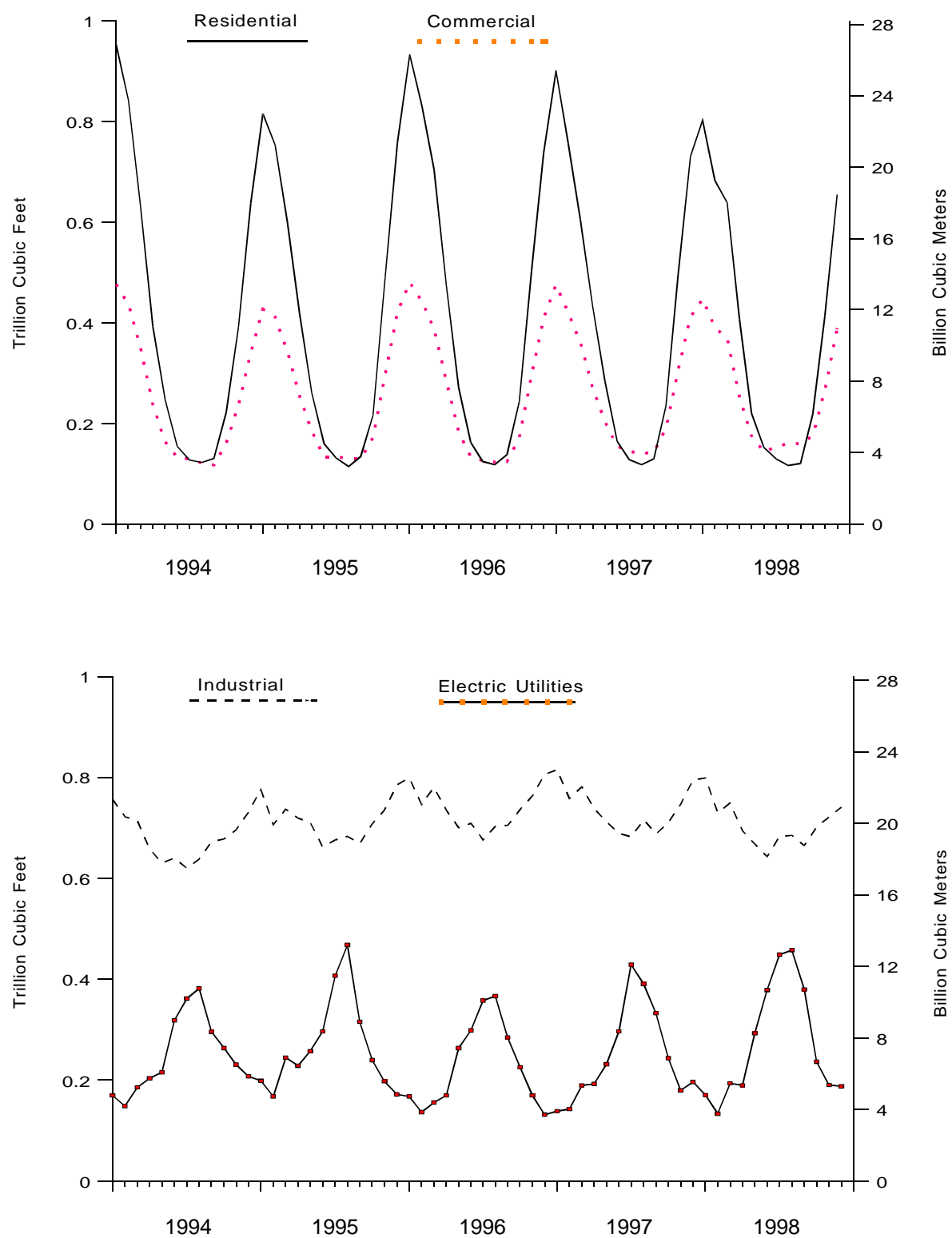
NA = Not Available.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1992-1996: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1996*. January 1997 through the current month: EIA: Form 895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

— Data not available.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1994-1998



Sources: *Natural Gas Annual*, Form EIA-857, and Form EIA-759.

Table 4. Selected National Average Natural Gas Prices, 1992-1998

(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price ^a	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total ^b	Price	% of Total ^b	
1992 Annual Average	1.74	3.01	5.89	4.88	83.2	2.84	30.3	2.36
1993 Annual Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996								
January	2.05	3.14	5.64	5.29	83.2	3.61	22.0	2.87
February	1.89	3.16	5.82	5.25	83.3	3.61	22.7	3.07
March	1.95	3.17	5.93	5.36	81.8	3.52	22.3	2.73
April	2.08	3.22	6.27	5.34	79.5	3.42	20.5	2.68
May	2.01	3.18	6.84	5.40	74.6	3.14	18.7	2.52
June	2.08	3.41	7.83	5.43	70.0	3.13	16.7	2.59
July	2.25	3.49	8.64	5.46	67.8	3.17	18.6	2.69
August	2.10	3.46	8.73	5.56	66.3	3.05	17.4	2.57
September	1.85	3.05	7.99	5.46	67.1	2.77	16.9	2.24
October	1.94	2.94	7.05	5.33	69.1	2.89	17.2	2.37
November	2.50	3.46	6.37	5.40	75.7	3.57	18.5	3.04
December	3.26	4.18	6.47	5.78	78.1	4.20	20.0	3.98
Annual Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997								
January	3.40	4.28	6.74	6.18	78.8	4.65	21.6	4.06
February	2.49	3.76	6.79	6.13	78.4	4.20	19.7	2.97
March	1.79	3.04	6.52	5.72	74.0	3.35	18.8	2.29
April	1.81	2.92	6.53	5.46	71.8	3.02	18.4	2.30
May	2.00	3.11	6.83	5.39	65.5	2.96	18.1	2.41
June	2.08	3.41	8.30	5.64	61.7	3.10	17.4	2.52
July	2.00	3.44	8.78	5.35	59.5	3.06	15.3	2.44
August	2.08	3.34	8.99	5.43	57.9	2.90	15.6	2.53
September	2.33	3.50	8.84	5.57	59.5	3.25	15.1	2.96
October	2.68	3.86	7.69	5.73	62.9	3.69	16.8	3.24
November	2.92	3.91	6.86	5.85	70.4	4.07	18.0	3.41
December	2.28	3.42	6.54	5.70	72.8	3.79	17.2	2.77
Annual Average	2.32	3.61	6.94	5.79	70.8	3.59	17.7	2.74
1998								
January	^E 1.89	3.28	^R 6.47	5.59	72.4	3.68	14.9	2.64
February	^E 1.80	3.08	6.41	5.56	71.0	3.52	15.3	2.51
March	^E 1.95	3.22	6.27	5.38	^R 71.6	3.41	16.5	2.54
April	^E 2.02	^R 3.21	^R 6.78	^R 5.58	67.0	3.22	15.0	2.59
May	^E 1.96	3.11	7.59	^R 5.62	^R 60.2	3.10	13.9	2.46
June	^E 1.78	^R 2.98	^R 8.41	5.53	^R 59.9	2.95	^R 13.9	2.40
July	^E 2.05	^R 3.36	^R 8.62	5.63	^R 51.3	2.99	^R 12.7	2.50
August	^{RE} 1.84	^R 3.13	^R 9.18	^R 5.49	^R 46.8	2.73	13.6	2.21
September	^E 1.83	2.75	8.93	5.52	49.4	2.64	14.5	NA
1998 YTD^c	^E 1.90	3.15	6.89	5.54	64.8	3.17	14.5	2.44
1997 YTD	2.22	3.53	6.99	5.80	71.2	3.47	17.9	2.59
1996 YTD	2.03	3.21	6.27	5.34	78.4	3.31	19.6	2.67

^a See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.

^b Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 24 for breakdown by State.

^c Year-to-date price represents months for which price information is available in the current year.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

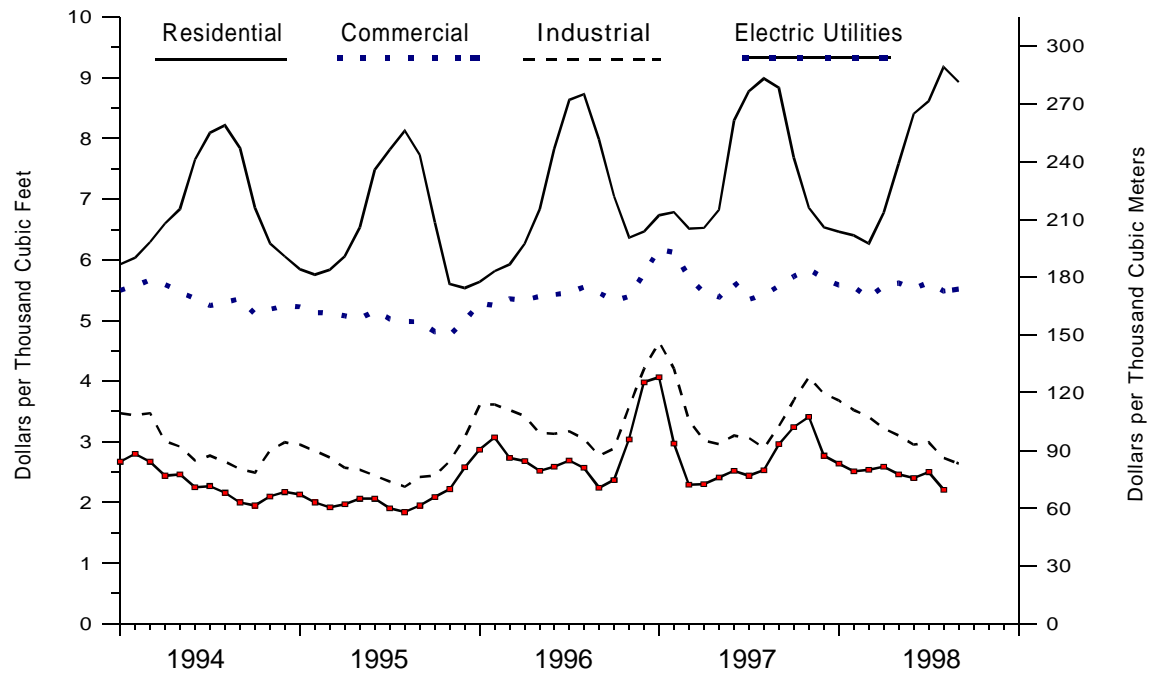
NA = Not Available.

Notes: Data for 1991 through 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1990-1996: Energy Information Administration (EIA) *Natural Gas Annual 1996*. 1997 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates.

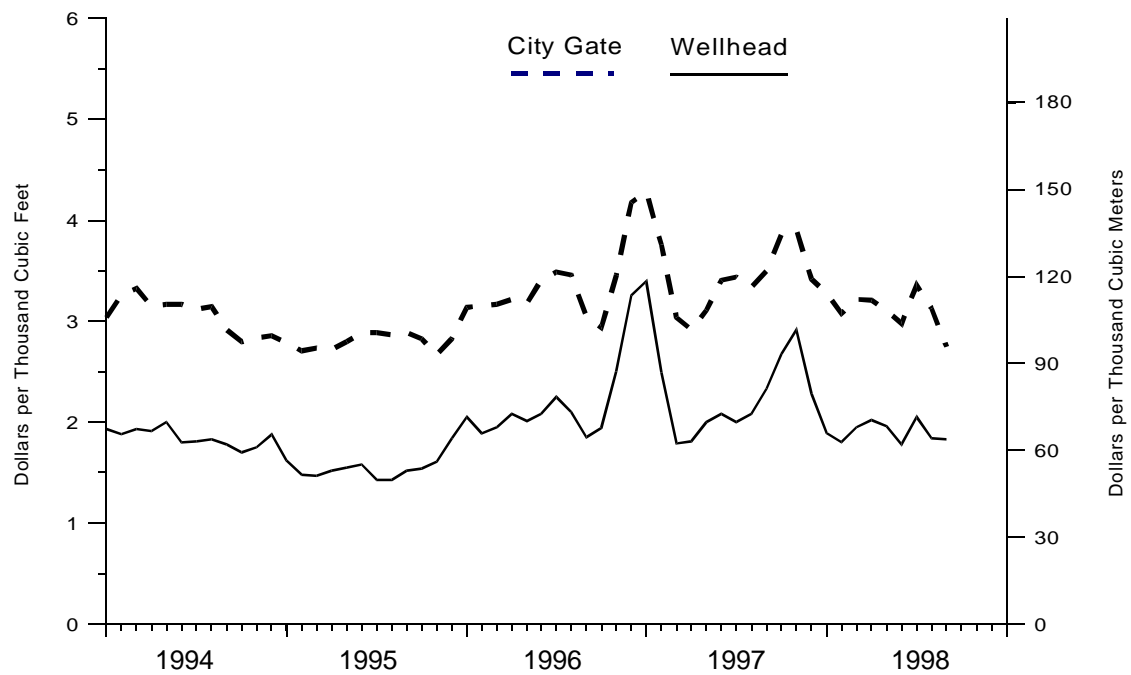
January 1997 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998



Source: Table 4.

Figure 4. Average Price of Natural Gas in the United States, 1994-1998



Source: Table 4.

Table 5. U.S. Natural Gas Imports, by Country, 1992-1998
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Algeria		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	2,094,387	1.84	—	—	43,116	2.54	—	—	2,137,504	1.85
1993 Total	2,266,751	2.02	1,678	1.94	81,685	2.20	—	—	2,350,115	2.03
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	—	—	2,623,839	1.87
1995 Total	2,816,408	1.48	6,722	1.53	17,918	2.30	—	—	2,841,048	1.49
1996										
January	259,656	2.08	1,499	2.03	2,460	2.81	—	—	263,615	2.09
February	230,546	1.94	698	2.14	2,512	2.79	—	—	233,756	1.95
March	237,668	1.91	1,259	2.34	2,599	3.06	—	—	241,526	1.92
April	230,928	1.86	1,369	2.18	4,559	2.43	—	—	236,857	1.87
May	245,522	1.70	4,024	2.14	2,612	2.58	—	—	252,158	1.72
June	225,875	1.70	711	2.35	0	—	—	—	226,587	1.70
July	232,908	1.82	1,313	2.58	2,642	3.00	—	—	236,864	1.84
August	235,199	1.80	30	1.70	2,629	2.56	—	—	237,858	1.80
September	234,206	1.60	770	1.69	0	—	^a 2,524	3.34	237,500	1.62
October	241,294	1.68	1,110	2.37	5,116	2.96	—	—	247,520	1.71
November	245,795	2.25	982	2.85	5,031	2.59	—	—	251,807	2.26
December	263,681	3.00	96	3.30	5,164	2.51	^a 2,425	3.57	271,366	3.00
Total	2,883,277	1.96	13,862	2.25	35,325	2.70	4,949	3.45	2,937,413	1.97
1997										
January	266,756	3.27	1,555	3.09	7,560	2.78	^a 2,417	3.68	278,288	3.26
February	230,352	2.50	2,526	2.49	7,667	3.00	—	—	240,545	2.52
March	251,328	1.70	3,127	1.83	2,530	2.98	—	—	256,985	1.72
April	235,431	1.66	189	1.92	2,557	2.23	—	—	238,178	1.67
May	234,345	1.81	2,380	2.03	2,552	2.20	^b 2,455	2.68	241,732	1.83
June	225,366	1.87	1,692	2.20	5,059	2.49	—	—	232,118	1.88
July	229,479	1.82	1,088	1.98	5,026	2.48	—	—	235,593	1.84
August	237,142	1.81	6	2.35	7,535	2.43	—	—	244,684	1.83
September	232,090	2.00	29	2.47	5,030	2.41	^b 2,337	2.88	239,486	2.01
October	245,742	2.32	965	2.92	5,050	2.70	—	—	251,758	2.33
November	257,782	2.71	1,874	2.82	7,542	2.89	^b 4,893	3.07	272,091	2.72
December	253,338	2.17	1,810	2.12	7,567	2.88	—	—	262,716	2.19
Total	2,899,152	2.15	17,243	2.32	65,675	2.67	12,103	3.08	2,994,173	2.17
1998										
January	273,189	2.02	56	2.11	10,105	2.89	—	—	283,351	2.05
February	235,288	1.95	2,824	1.97	7,607	2.83	^b 2,171	3.84	247,890	1.99
March	258,067	1.99	382	2.20	5,166	3.12	—	—	263,615	2.01
April	242,191	2.00	3,251	2.37	2,549	2.20	—	—	247,991	2.01
May	242,041	1.98	846	2.15	7,596	2.52	—	—	250,483	2.00
June	243,259	1.92	5	2.21	5,125	2.39	^b 2,441	2.79	250,830	1.94
July	256,506	NA	^{RE} 1,800	NA	5,086	NA	—	—	^{RE} 263,393	NA
August	^a 249,717	NA	^{RE} 1,800	NA	2,540	NA	^b 2,321	NA	^{RE} 256,379	NA
September	^a 260,599	NA	^{RE} 1,900	NA	5,133	NA	—	—	^{RE} 267,632	NA
October	^E 266,302	NA	^E 1,800	NA	5,025	NA	—	—	^E 273,127	NA
1998 YTD	^E 2,527,159	NA	^E 14,664	NA	55,933	NA	6,933	NA	^E 2,604,689	NA
1997 YTD	2,388,032	2.09	13,558	2.27	50,567	2.61	7,210	3.08	2,459,366	2.11
1996 YTD	2,373,801	1.81	12,784	2.20	25,131	2.77	2,524	3.34	2,414,240	1.82

^a Received from the United Arab Emirates.

^b Received from Australia.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

— = Not Applicable.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1992-1998
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Total	
	Canada		Mexico		Japan		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	67,777	1.83	95,973	1.90	52,532	3.43	216,282	2.25
1993 Total	44,518	2.14	39,676	2.02	55,989	3.34	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	65,283	3.41	154,119	2.39
1996								
January	7,044	3.13	1,607	1.98	5,534	3.38	14,186	3.10
February	5,207	2.71	2,000	1.82	5,621	3.35	12,828	2.85
March	6,616	2.79	2,860	1.81	5,642	3.55	15,118	2.88
April	2,430	2.21	1,924	1.69	5,654	3.57	10,008	2.88
May	2,809	2.15	1,899	1.84	3,750	3.61	8,458	2.73
June	3,001	2.25	3,486	2.16	5,651	3.65	12,138	2.87
July	3,777	2.45	3,062	2.24	7,546	3.66	14,385	3.04
August	2,197	2.30	9,176	2.11	5,663	3.67	17,036	2.65
September	2,514	1.94	2,389	1.73	5,663	3.73	10,566	2.85
October	4,311	1.97	1,990	1.85	5,589	3.84	11,889	2.83
November	6,776	2.77	1,533	2.56	5,670	4.01	13,979	3.25
December	5,222	3.67	1,914	3.72	5,665	3.73	12,801	3.70
Total	51,905	2.67	33,840	2.11	67,648	3.65	153,393	2.97
1997								
January	4,193	4.08	2,231	4.08	5,604	4.25	12,028	4.16
February	5,169	3.02	1,677	2.32	5,596	4.20	12,443	3.46
March	9,115	2.05	1,486	1.55	5,675	4.16	16,276	2.74
April	5,168	1.78	3,044	1.83	5,660	4.06	13,872	2.72
May	4,107	2.08	2,177	1.96	3,812	3.83	10,097	2.72
June	3,162	2.28	2,579	2.14	3,786	3.72	9,527	2.81
July	3,257	2.14	3,122	2.17	3,756	3.66	10,136	2.71
August	3,820	2.15	6,282	2.37	7,532	3.62	17,633	2.86
September	3,129	2.37	6,159	2.59	3,767	3.58	13,055	2.83
October	2,432	2.85	4,182	2.87	5,676	3.58	12,289	3.19
November	5,579	3.10	1,782	3.16	5,691	3.66	13,051	3.35
December	7,318	2.58	3,650	2.30	5,631	3.58	16,600	2.86
Total	56,447	2.52	38,372	2.46	62,187	3.83	157,006	3.02
1998								
January	5,056	2.53	4,257	2.11	7,446	3.67	16,759	2.93
February	4,474	2.14	3,119	2.06	3,726	3.42	11,319	2.54
March	7,818	2.25	4,204	2.14	7,435	3.09	19,457	2.55
April	4,409	2.47	2,676	2.22	5,702	2.81	12,787	2.57
May	2,083	2.28	6,123	2.12	1,891	2.70	10,097	2.26
June	3,404	1.73	5,618	1.98	5,695	3.09	14,717	2.35
July	RE2,000	NA	RE4,100	NA	5,681	NA	RE11,781	NA
August	RE2,000	NA	RE4,100	NA	5,676	NA	RE11,776	NA
September	RE2,000	NA	RE4,200	NA	7,584	NA	RE13,784	NA
October	E2,000	NA	E4,100	NA	5,679	NA	E11,779	NA
1998 YTD	E35,244	NA	E42,497	NA	56,515	NA	E134,256	NA
1997 YTD	43,550	2.43	32,939	2.44	50,865	3.88	127,355	3.01
1996 YTD	39,906	2.52	30,393	1.98	56,313	3.60	126,613	2.87

^E = Estimated Data.

^{RE} = Revised Estimated Data.

^{NA} = Not Available.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet)

Year and Month	Alabama ^b	Alaska	Arizona	California	Colorado	Florida	Kansas
1992 Total	355,099	443,597	771	365,632	323,041	6,657	658,007
1993 Total	388,024	430,350	597	315,851	400,985	7,085	686,347
1994 Total	515,272	555,402	752	309,427	453,207	7,486	712,730
1995 Total	519,661	469,550	558	279,555	523,084	6,463	721,436
1996							
January	45,653	44,655	41	20,714	48,619	518	62,976
February	42,668	40,433	42	22,910	45,504	493	62,683
March	45,334	43,738	45	24,686	47,843	460	63,027
April	43,868	39,694	36	23,988	45,293	456	60,858
May	45,160	36,348	39	24,091	46,893	483	62,194
June	43,319	37,334	45	23,281	45,212	503	56,318
July	43,257	37,272	30	24,495	45,570	500	57,095
August	43,873	37,239	43	24,547	51,269	540	55,144
September	42,834	38,039	31	23,826	45,437	537	55,563
October	42,200	41,204	34	24,261	50,245	468	57,589
November	45,395	40,706	37	24,493	49,824	517	58,460
December	47,278	44,166	40	25,203	50,363	531	60,890
Total	530,841	480,828	463	286,494	572,071	6,006	712,796
1997							
January	48,213	43,497	46	24,430	52,755	527	60,198
February	46,024	39,391	41	21,876	48,424	512	55,275
March	51,313	42,625	42	23,910	53,954	610	60,099
April	51,246	38,687	39	23,248	52,529	554	58,357
May	48,802	35,427	36	23,590	52,376	541	61,661
June	47,342	36,344	28	22,928	50,715	450	59,996
July	46,370	36,284	31	23,981	52,964	514	58,234
August	46,314	36,270	30	23,841	54,041	505	61,937
September	48,911	37,041	30	23,760	52,742	519	49,658
October	50,634	40,095	34	24,437	54,260	452	53,815
November	49,734	39,631	57	24,792	55,549	439	54,152
December	48,368	43,020	39	24,896	57,064	491	53,834
Total	583,272	468,311	452	285,690	637,375	6,114	687,215
1998							
January	32,739	43,715	43	24,810	53,025	479	^E 51,399
February	29,230	38,016	42	21,719	51,770	436	^E 48,969
March	33,505	41,026	53	22,869	56,834	466	^E 50,055
April	32,406	^R 38,188	43	21,952	55,760	480	^E 49,045
May	33,656	^R 35,200	38	23,889	56,151	512	^E 50,901
June	33,257	^R 36,116	34	24,837	54,493	428	^E 48,050
July	^R 33,696	^R 36,501	42	27,152	56,370	504	^E 48,048
August	33,719	36,331	36	^E 27,913	56,841	529	^E 48,172
1998 YTD	262,209	305,093	329	^E 195,141	441,244	3,833	^E 394,639
1997 YTD	385,625	308,525	293	187,805	417,759	4,213	475,757
1996 YTD	353,134	316,713	321	188,712	376,203	3,952	480,293

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet) — Continued

Year and Month	Louisiana ^b	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1992 Total	4,914,300	194,815	91,697	53,867	1,268,863	54,883	2,017,356
1993 Total	4,991,138	204,635	80,695	54,528	1,409,429	59,851	2,049,942
1994 Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805	1,934,864
1995 Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468	1,811,734
1996							
January	437,274	21,912	8,089	4,503	135,594	4,276	143,693
February	412,611	18,686	7,386	4,266	126,370	3,880	139,115
March	446,371	11,208	8,385	4,443	138,091	4,164	131,701
April	436,014	32,072	8,225	4,098	132,572	4,122	147,949
May	451,148	18,021	9,026	4,244	138,946	4,273	149,425
June	434,668	23,572	8,983	3,496	131,778	3,990	143,675
July	449,052	27,119	9,335	3,603	125,193	4,047	146,451
August	449,461	23,261	9,193	4,050	126,967	4,096	148,463
September	431,768	20,208	8,641	4,172	122,040	4,185	143,302
October	421,252	20,374	8,996	4,668	123,570	4,246	150,322
November	427,566	16,081	8,487	4,521	124,377	4,216	146,828
December	443,563	13,227	8,518	4,933	128,590	4,178	143,965
Total	5,240,747	245,740	103,263	50,996	1,554,087	49,674	1,734,887
1997							
January	445,257	34,940	8,253	4,654	135,263	3,952	144,608
February	405,366	16,875	7,807	4,451	122,656	3,899	134,455
March	447,802	24,790	8,470	4,836	137,830	4,453	147,098
April	431,010	12,944	8,120	4,654	132,438	4,364	136,246
May	443,269	39,819	8,611	4,561	136,553	4,539	142,336
June	425,934	19,314	8,893	3,808	125,256	4,348	138,038
July	434,326	40,026	8,636	4,114	131,806	4,427	144,769
August	438,965	18,597	9,626	4,213	134,140	4,486	147,528
September	430,599	22,451	9,162	4,199	128,915	4,381	150,488
October	445,702	20,297	10,084	3,150	134,623	4,508	145,054
November	434,908	26,013	9,683	4,706	120,856	4,416	135,537
December	446,682	29,885	9,955	5,091	118,298	4,629	137,731
Total	5,229,821	305,950	107,300	52,437	1,558,633	52,401	1,703,888
1998							
January	463,097	28,439	9,639	^E 5,058	142,312	4,623	145,522
February	422,324	28,259	8,574	^E 4,668	142,383	4,020	134,651
March	468,307	30,719	9,781	^E 5,018	141,671	4,337	142,541
April	449,961	17,983	8,957	^E 4,714	140,963	4,284	134,885
May	461,826	29,164	9,121	^E 4,672	140,258	4,488	142,725
June	454,466	26,962	8,586	^E 3,805	^E 131,574	4,210	137,906
July	454,506	^R 26,188	9,258	^E 3,990	^E 132,121	4,384	140,664
August	457,471	19,037	8,835	^E 4,242	^E 135,482	4,499	143,345
1998 YTD	3,631,958	206,752	72,751	^E 36,167	^E 1,106,764	34,843	1,122,239
1997 YTD	3,471,929	207,304	68,416	35,292	1,055,942	34,468	1,135,078
1996 YTD	3,516,598	175,851	68,622	32,702	1,055,511	32,849	1,150,471

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas ^c	Utah	Wyoming	Other ^a States	U.S. Total
1992 Total	2,580	6,145,862	171,293	842,576	800,913	18,711,808
1993 Total	4,003	6,249,624	225,401	634,957	788,472	18,981,915
1994 Total	3,221	6,353,844	270,858	696,018	774,724	19,709,525
1995 Total	1,923	6,330,048	241,290	673,775	759,728	19,506,474
1996						
January	120	545,658	19,998	58,691	69,638	1,672,623
February	75	512,557	18,027	56,037	66,726	1,580,472
March	105	552,700	21,650	57,270	72,373	1,673,596
April	121	529,015	20,864	54,662	65,643	1,649,552
May	140	547,843	21,035	52,805	67,061	1,679,176
June	132	533,168	20,759	59,346	64,752	1,634,329
July	146	557,986	20,573	55,519	64,500	1,671,743
August	117	550,499	21,137	54,567	66,523	1,670,989
September	132	529,524	21,589	51,949	65,361	1,609,140
October	133	543,264	22,152	53,649	69,163	1,637,792
November	113	517,147	21,606	53,990	70,997	1,615,362
December	102	529,659	21,376	57,551	71,875	1,656,019
Total	1,439	6,449,022	250,767	666,036	814,612	19,750,793
1997						
January	105	554,934	21,782	59,016	66,837	1,709,269
February	98	506,768	19,115	55,848	59,897	1,548,774
March	101	564,269	21,912	61,159	64,286	1,719,559
April	102	539,499	19,570	64,278	61,118	1,639,002
May	102	552,230	22,053	62,726	62,301	1,701,532
June	97	529,765	19,815	59,667	59,069	1,611,809
July	98	546,610	21,711	60,324	58,493	1,673,719
August	99	548,267	21,024	61,091	59,686	1,670,660
September	86	525,836	22,007	64,678	56,803	1,632,265
October	97	540,150	23,006	64,992	62,912	1,678,302
November	91	519,274	22,840	62,181	60,863	1,625,720
December	96	526,271	22,307	62,410	64,414	1,655,481
Total	1,173	6,453,873	257,139	738,368	736,679	19,866,093
1998						
January	90	542,462	21,826	66,074	^E 61,837	^E 1,697,189
February	79	491,530	21,758	53,970	^E 57,200	^E 1,559,599
March	96	541,311	23,656	65,704	^E 61,188	^E 1,699,137
April	92	525,602	23,513	61,974	^E 57,188	^{RE} 1,627,991
May	92	550,442	24,967	54,304	^E 58,146	^{RE} 1,680,552
June	90	527,613	23,968	63,574	^E 56,699	^{RE} 1,636,666
July	95	547,880	^R 23,036	64,917	^E 55,998	^{RE} 1,665,349
August	94	561,133	^E 23,109	66,273	^E 57,217	^E 1,684,278
1998 YTD	728	4,287,973	^E 185,833	496,791	^E 465,473	^E 13,250,760
1997 YTD	803	4,342,342	166,980	484,108	491,687	13,274,325
1996 YTD	957	4,329,427	164,044	448,897	537,215	13,232,480

^a Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1997 monthly values for these States are estimated.

^b All data for 1991 through 1996 include Federal Offshore production. For 1997 and 1998, data for Alabama exclude Federal Offshore production and data for Louisiana include both the Louisiana and Alabama portions of Federal Offshore production.

^c Federal offshore production volumes are included.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

Notes: Data for 1991 through 1996 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1991-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*; 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

**Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State,
August 1998**
(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydro- carbon Gases Removed ^a	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	36,554	723	37,277	1,130	2,322	106	33,719
Alaska	14,627	249,185	263,812	226,720	0	761	36,331
Arizona	31	5	36	0	0	0	36
California	^E 7,470	^E 29,291	^E 36,761	^E 8,593	^E 172	^E 84	^E 27,913
Colorado	49,885	7,681	57,566	641	0	83	56,841
Florida	0	597	597	0	69	0	529
Kansas	^E 44,438	^E 3,864	^E 48,303	^E 82	0	^E 48	^E 48,172
Louisiana	402,572	60,518	463,090	3,632	0	1,987	457,471
Michigan	15,494	3,874	19,368	136	0	194	19,037
Mississippi	10,080	649	10,729	917	746	232	8,835
Montana	^E 3,753	^E 658	^E 4,411	^E 5	0	^E 163	^E 4,242
New Mexico	^E 127,886	^E 22,168	^E 150,054	^E 914	^E 13,415	^E 243	^E 135,482
North Dakota	1,463	3,470	4,933	0	5	430	4,499
Oklahoma	130,454	12,891	143,345	0	0	0	143,345
Oregon	111	0	111	4	13	0	94
Texas	497,535	120,389	617,923	39,988	14,202	2,600	561,133
Utah	^E 21,208	^E 3,437	^E 24,646	^E 42	0	^E 1,495	^E 23,109
Wyoming	102,299	5,228	107,527	13,028	14,104	14,122	66,273
Other States	^E 54,203	^E 3,675	^E 57,878	^E 156	^E 394	^E 112	^E 57,217
Total	^E 1,520,063	^E 528,303	^E 2,048,367	^E 295,988	^E 45,441	^E 22,659	^E 1,684,278

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^E = Estimated Data.

Notes: All monthly data are considered preliminary until publication of the *Natural Gas Annual* for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Source: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1992-1998
(Volumes in Billion Cubic Feet)

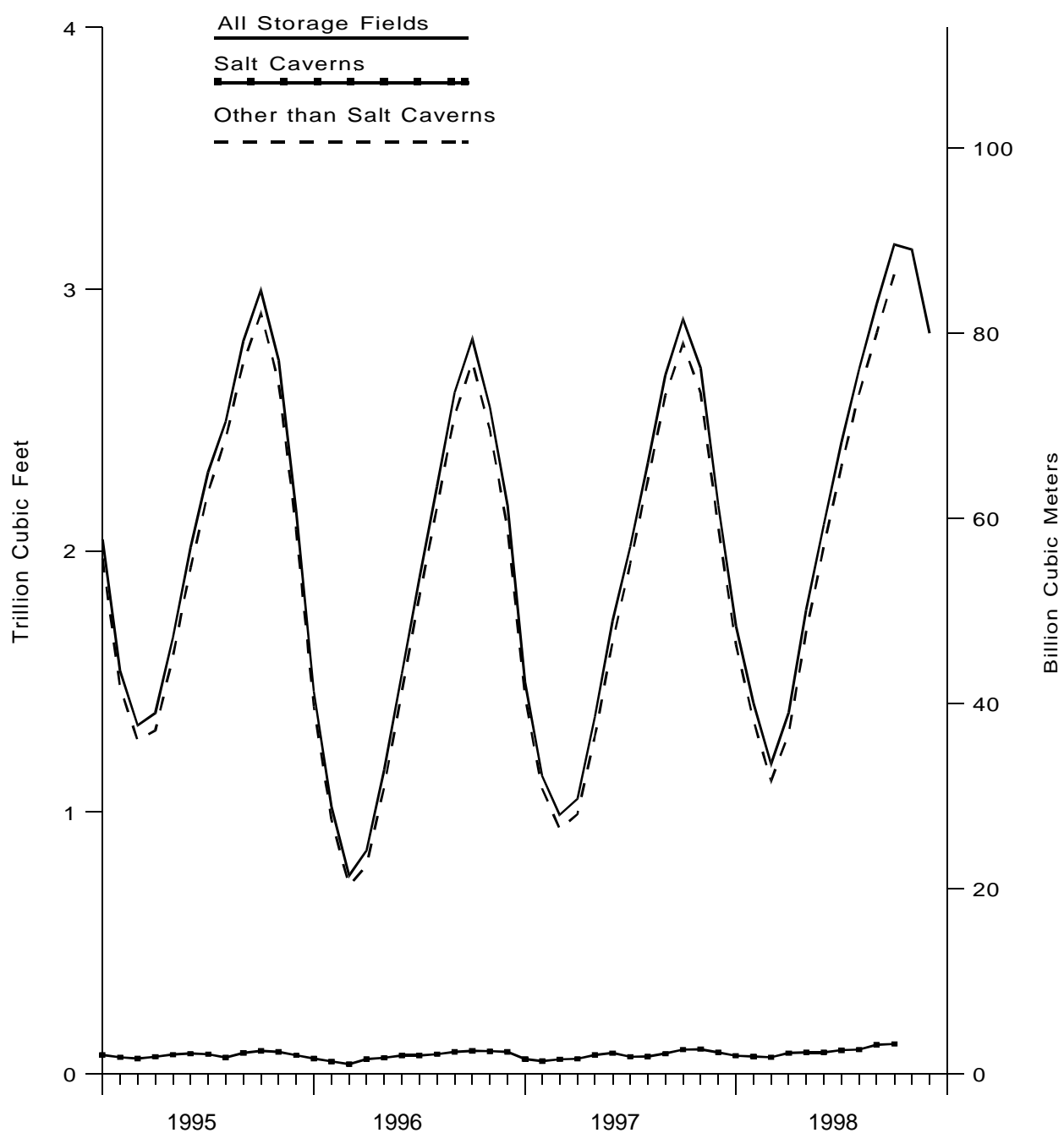
Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^b	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^c
1992 Total^a	4,044	2,597	6,641	-227	-8.0	2,555	2,724	168
1993 Total^a	4,327	2,322	6,649	-275	-10.6	2,760	2,717	-43
1994 Total^a	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995 Total^a	4,349	2,153	6,503	-453	3.1	2,566	2,974	408
1996								
January	4,354	1,462	5,817	-583	-28.5	49	749	700
February	4,349	1,021	5,369	-521	-33.8	97	544	447
March	4,290	758	5,048	-574	-43.1	80	403	323
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
Total	—	—	—	—	—	2,906	2,911	6
1997								
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
Total	—	—	—	—	—	2,800	2,824	24
1998								
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
April	4,336	1,381	5,718	330	31.4	277	78	-198
May	4,338	1,773	6,111	412	30.2	435	42	-393
June	4,343	2,101	6,444	371	21.4	375	52	-323
July	4,337	2,416	6,753	402	20.0	366	52	-314
August	4,333	2,695	7,028	358	15.3	341	58	-283
September	4,337	2,946	7,284	274	10.2	305	78	-227
October	4,339	3,172	7,512	287	9.9	301	46	-255
November(STIFS)	^{RE} 4,339	^{RE} 3,152	^{RE} 7,491	^{RE} 453	^{RE} 16.8	NA	NA	^{RE} 20
December(STIFS)	^E 4,339	^E 2,832	^E 7,171	^E 657	^E 30.2	NA	NA	^E 320
Total	—	—	—	—	—	NA	NA	-646

^a Total as of December 31.
^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; and 1997 - 8128.
^c Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.
^E = Estimated Data.
^{RE} = Revised Estimated Data.
^{NA} = Not Available.
— = Not Applicable.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Underground Natural Gas Storage in the United States, 1995-1998



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1993-1998

(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^a
March 1996	4,290	758	5,048	-574	-43.1	80	403	323
1996 Refill Season								
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
Total	—	—	—	—	—	2,502	401	-2,102
1996-97 Heating Season								
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
Total	—	—	—	—	—	430	2,266	1,835
1997 Refill Season								
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
Total	—	—	—	—	—	2,388	492	-1,896
1997-98 Heating Season								
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
Total	—	—	—	—	—	436	2,165	1,729
1998 Refill Season								
April	4,336	1,381	5,718	330	31.4	277	78	-198
May	4,338	1,773	6,111	412	30.2	435	42	-393
June	4,343	2,101	6,444	371	21.4	375	52	-323
July	4,337	2,416	6,753	402	20.0	366	52	-314
August	4,333	2,695	7,028	358	15.3	341	58	-283
September	4,337	2,946	7,284	274	10.2	305	78	-227
October	4,339	3,172	7,512	287	9.9	301	46	-255
Total	—	—	—	—	—	2,399	406	-1,993
1998-99 Heating Season								
November(STIFS)	^{RE} 4,339	^{RE} 3,152	^{RE} 7,491	^{RE} 453	^{RE} 16.8	NA	NA	^{RE} 20
December(STIFS)	^E 4,339	^E 2,832	^E 7,171	^E 657	^E 30.2	NA	NA	^E 320

^a Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1996-1998
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	63	59	122	-14	-19.3	23	41	17
February	63	48	111	-17	-26.2	23	33	10
March	63	38	101	-21	-35.2	21	32	11
April	63	57	120	-9	-13.7	30	10	-20
May	63	62	126	-11	-15.1	19	13	-6
June	63	71	135	-7	-8.9	21	12	-9
July	60	71	131	-5	-6.7	20	14	-6
August	60	76	136	13	20.5	21	16	-5
September	60	85	145	4	5.0	23	13	-9
October	60	88	148	0	0.4	17	14	-3
November	64	87	151	3	4.0	16	20	5
December	64	85	149	14	18.8	25	28	2
Total	—	—	—	—	—	258	246	-13
1997								
January	65	57	122	-2	-3.1	21	51	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	22	19	-2
May	65	73	138	10	17.3	27	13	-14
June	66	80	145	8	11.7	22	16	-7
July	65	66	131	-6	-7.5	15	30	15
August	65	67	132	-11	-12.4	23	22	0
September	65	78	143	-9	-8.7	27	14	-12
October	66	93	159	4	5.6	30	14	-16
November	67	95	162	7	9.4	25	24	-2
December	67	83	150	-4	-3.0	19	31	12
Total	—	—	—	—	—	267	274	6
1998								
January	66	70	136	13	22.4	17	31	14
February	65	67	132	18	35.9	17	21	3
March	68	64	132	8	14.4	23	28	6
April	68	80	148	22	37.9	29	11	-17
May	68	83	150	9	12.9	26	22	-3
June	66	83	149	3	4.0	21	23	2
July	66	91	157	26	39.2	26	18	-8
August	65	93	158	26	39.5	24	21	-2
September	67	112	179	34	44.2	22	30	9
October	67	115	182	22	23.7	44	12	-32

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1996-1998

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	4,291	1,404	5,695	-569	-28.8	26	708	682
February	4,286	973	5,259	-504	-34.1	73	510	437
March	4,228	720	4,948	-553	-43.4	59	371	312
April	4,249	797	5,046	-516	-39.3	197	102	-95
May	4,268	1,099	5,367	-496	-31.1	354	32	-322
June	4,277	1,458	5,735	-478	-24.7	390	23	-366
July	4,276	1,827	6,103	-399	-17.9	398	34	-363
August	4,272	2,169	6,441	-263	-10.8	380	39	-341
September	4,277	2,520	6,797	-201	-7.4	376	19	-357
October	4,275	2,722	6,997	-186	-6.4	259	59	-200
November	4,275	2,462	6,737	-183	-6.9	75	333	259
December	4,277	2,087	6,364	6	0.3	61	433	372
Total	—	—	—	—	—	2,647	2,665	18
1997								
January	4,282	1,439	5,721	34	2.5	47	702	654
February	4,283	1,090	5,372	116	12.0	40	390	350
March	4,280	935	5,215	214	29.8	109	269	160
April	4,277	993	5,270	195	24.6	184	127	-56
May	4,275	1,292	5,566	191	17.6	335	28	-307
June	4,291	1,651	5,942	194	13.3	385	26	-358
July	4,290	1,951	6,241	124	6.8	346	49	-297
August	4,291	2,271	6,563	103	4.7	356	34	-322
September	4,295	2,595	6,890	75	3.0	353	29	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,292	2,604	6,896	142	5.8	88	278	191
December	4,283	2,092	6,375	4	0.2	27	548	521
Total	—	—	—	—	—	2,533	2,551	18
1998								
January	4,278	1,641	5,920	202	14.0	51	504	453
February	4,273	1,351	5,624	260	23.9	56	352	296
March	4,271	1,120	5,391	185	19.8	113	349	236
April	4,269	1,301	5,570	308	31.0	248	67	-181
May	4,270	1,691	5,961	402	31.2	409	20	-390
June	4,277	2,018	6,295	367	22.3	354	29	-325
July	4,271	2,324	6,596	376	19.3	340	34	-306
August	4,268	2,602	6,870	332	14.6	317	37	-281
September	4,270	2,834	7,104	240	9.2	283	48	-235
October	4,272	3,057	7,329	265	9.5	257	34	-223

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet)

State	1998						
	October	September	August	July	June	May	April
Alabama	-613	401	-200	9	-623	-144	-245
Arkansas	-580	-817	-1,005	-1,034	-1,100	-1,046	-471
California	-23,926	-9,990	-7,283	-9,435	-27,493	-29,210	-10,710
Colorado	-2,043	-5,919	-5,877	-4,060	-3,907	-6,040	3,534
Illinois	-27,923	-28,122	-31,634	-25,062	-31,348	-25,967	-293
Indiana	-2,904	-4,534	-3,695	-2,476	-575	-446	917
Iowa	-7,108	-12,149	-12,102	-11,525	-8,405	-3,600	348
Kansas	-8,737	-9,284	-12,200	-13,108	-6,267	-19,324	-6,954
Kentucky	-5,237	-8,821	-4,533	-10,622	-8,137	-11,793	-2,480
Louisiana	-30,831	-9,708	-20,159	-25,597	-14,635	-22,794	-21,191
Maryland	-1,267	-783	-1,407	-2,924	-1,251	-808	-1,127
Michigan	-27,089	-31,023	-52,128	-60,857	-69,589	-69,296	-31,779
Minnesota	-187	-275	-214	-289	-169	0	159
Mississippi	-9,800	156	-4,139	-5,961	-2,887	-3,438	-2,757
Missouri	-208	-414	-203	8	143	-460	48
Montana	-1,532	-4,239	-4,524	-2,295	-2,024	-2,571	224
Nebraska	-363	-864	-616	-796	-528	-860	754
New Mexico	-1,903	-1,185	-208	-191	-180	-1,120	287
New York	-4,464	-5,640	-5,247	-8,108	-8,786	-11,267	-3,673
Ohio	-12,746	-19,259	-27,246	-31,220	-25,882	-35,968	-14,906
Oklahoma	-19,520	-12,146	-7,189	-7,554	-12,460	-23,277	-21,343
Oregon	4	-818	-819	-852	-1,411	0	81
Pennsylvania	-20,091	-27,252	-19,657	-31,998	-34,236	-57,800	-32,842
Texas	-34,137	-5,040	-18,629	-18,872	-20,145	-27,286	-40,395
Utah	-3,879	-8,260	-7,385	-7,265	-8,225	-7,364	-596
Washington	719	-1,822	-3,640	-312	-2,963	-3,932	1,544
West Virginia	-7,094	-16,425	-29,075	-28,560	-26,404	-26,003	-14,607
Wyoming	-1,425	-2,602	-2,008	-2,807	-3,406	-1,344	89
AGA Regions							
Producing	-105,507	-38,023	-63,530	-72,318	-57,675	-98,285	-92,824
Eastern Consuming	-117,105	-154,885	-187,744	-214,131	-215,621	-244,412	-99,884
Western Consuming	-32,268	-33,925	-31,751	-27,316	-49,599	-50,461	-5,674
Total	-254,881	-226,833	-283,025	-313,764	-322,895	-393,158	-198,382

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet) — Continued

State	1998			1997			
	March	February	January	Total	December	November	October
Alabama	248	187	396	-162	243	243	-251
Arkansas	1,039	875	1,057	250	1,526	651	271
California	-2,257	26,766	29,805	16,340	58,418	2,846	-11,717
Colorado	3,928	6,337	3,510	-525	5,026	2,503	359
Illinois	28,186	36,082	58,036	-10,153	44,906	2,805	-28,399
Indiana	4,249	3,322	4,144	984	4,193	-879	-3,088
Iowa	6,692	5,335	18,905	-6,255	17,041	505	-8,412
Kansas	14,438	8,180	15,103	-11,372	12,277	8,384	-7,782
Kentucky	7,768	9,981	9,559	3,013	10,773	4,035	-2,926
Louisiana	7,400	5,164	21,574	-9,248	43,644	20,997	-24,035
Maryland	1,631	2,745	3,236	-544	1,298	33	-2,346
Michigan	55,388	45,886	84,170	-3,388	78,027	53,016	-32,466
Minnesota	416	203	444	-373	4	4	0
Mississippi	2,405	4,251	7,431	3,763	8,484	1,089	-2,126
Missouri	423	10	458	-453	228	-207	-215
Montana	3,017	2,554	4,421	11,962	3,169	2,760	1,015
Nebraska	1,090	355	376	-1,590	944	124	-69
New Mexico	658	-130	-412	2,065	2,500	25	-1,305
New York	7,977	9,548	11,582	304	10,735	4,857	-2,211
Ohio	28,619	34,023	34,810	-7,336	40,530	15,502	-8,809
Oklahoma	7,159	737	21,199	-9,482	25,362	13,995	-19,663
Oregon	934	1,253	540	-1,316	1,036	-262	-97
Pennsylvania	38,957	49,786	57,788	28,381	53,825	26,061	-15,914
Texas	-9,062	-3,341	35,935	10,035	53,619	18,531	-30,600
Utah	1,199	6,783	7,613	-7,571	13,169	2,721	-1,301
Washington	3,329	4,131	-58	-1,003	3,159	83	702
West Virginia	22,818	36,285	30,647	16,716	36,318	6,615	-8,145
Wyoming	2,611	2,059	3,990	908	3,019	1,906	-591
AGA Regions							
Producing	24,038	15,735	101,887	-13,990	147,412	63,672	-85,240
Eastern Consuming	204,045	233,545	314,105	19,518	299,061	112,710	-113,251
Western Consuming	13,177	50,086	50,266	18,423	87,001	12,560	-11,630
Total	241,260	299,366	466,258	23,950	533,474	188,941	-210,121

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet) — Continued

State	1997						
	September	August	July	June	May	April	March
Alabama	-262	-286	-43	-93	-271	-130	-25
Arkansas	-1,048	-1,234	-1,472	-1,340	-608	178	342
California	-6,637	-7,805	-11,213	-22,886	-23,687	-18,968	-289
Colorado	-5,203	-4,559	-5,592	-5,293	-5,375	5,441	2,020
Illinois	-35,655	-35,387	-32,161	-27,571	-23,526	-636	22,821
Indiana	-4,559	-3,722	-3,299	-1,913	-110	1,444	2,537
Iowa	-12,825	-11,001	-8,818	-8,375	-3,470	1,634	2,966
Kansas	-13,351	-11,129	-3,488	-11,777	-9,463	-1,497	4,053
Kentucky	-7,983	-6,520	-7,430	-8,997	-7,828	-363	4,141
Louisiana	-29,291	-15,446	-11,847	-19,809	-19,573	-3,990	-18,885
Maryland	-2,838	-2,353	-1,536	-1,700	-1,632	114	1,896
Michigan	-65,209	-73,230	-75,558	-73,547	-46,757	-14,032	53,634
Minnesota	-130	-142	-321	-312	-273	-40	177
Mississippi	-5,224	-3,109	741	-3,797	-5,573	449	-2,294
Missouri	-240	-379	-433	-112	-1,200	56	1,174
Montana	-1,490	-2,339	-2,710	-1,633	-846	1,810	2,591
Nebraska	-1,099	-971	-76	-803	-714	-47	-245
New Mexico	-853	-328	587	-534	-1,228	583	501
New York	-6,455	-11,606	-11,663	-11,184	-7,589	-1,623	9,239
Ohio	-23,499	-32,174	-34,224	-37,483	-34,205	-1,447	21,559
Oklahoma	-14,556	-8,393	-811	-7,984	-18,407	-7,180	-8,168
Oregon	-410	-1,178	-1,301	-1,681	-1,300	543	919
Pennsylvania	-48,745	-44,878	-42,074	-50,051	-43,897	-3,188	50,395
Texas	-21,731	-12,881	10,561	-20,379	-28,071	-17,396	-21,279
Utah	-3,235	-5,284	-8,117	-7,950	-4,255	-2,150	-2,620
Washington	-2,268	982	-495	-3,766	-5,881	-71	3,200
West Virginia	-19,091	-24,119	-26,183	-31,856	-24,165	1,674	23,270
Wyoming	-2,454	-2,727	-3,411	-2,304	-1,127	137	1,090
AGA Regions							
Producing	-86,054	-52,520	-5,729	-65,620	-82,922	-28,852	-45,732
Eastern Consuming	-228,461	-246,626	-243,499	-253,685	-195,364	-16,545	193,362
Western Consuming	-21,826	-23,050	-33,161	-45,825	-42,743	-13,297	7,088
Total	-336,341	-322,196	-282,389	-365,130	-321,030	-58,694	154,718

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet) — Continued

State	1997		1996			
	February	January	Total	December	November	October
Alabama	184	531	-1,224	761	129	-117
Arkansas	1,006	1,978	64	644	562	-603
California	19,814	38,462	51,292	14,985	-2,885	-6,393
Colorado	4,766	5,382	-1,004	2,923	92	-87
Illinois	39,383	63,269	-15,109	35,109	15,523	-28,103
Indiana	2,954	7,425	-1,801	3,290	-853	-2,715
Iowa	8,497	16,003	-1,229	18,020	5,502	-10,555
Kansas	8,989	13,411	12,118	12,290	12,828	-6,005
Kentucky	8,048	18,062	-7,530	8,039	4,853	-2,826
Louisiana	20,943	48,043	10,964	32,273	29,327	-15,704
Maryland	2,653	5,867	24	958	1,424	-1,553
Michigan	71,586	121,150	-31,671	83,640	61,160	-49,100
Minnesota	109	551	-30	218	30	-35
Mississippi	2,905	12,216	-12,758	4,658	5,707	-3,369
Missouri	-252	1,126	-48	76	306	-210
Montana	3,983	5,651	11,725	5,512	4,760	336
Nebraska	502	865	-1,489	1,108	479	600
New Mexico	1,527	591	5,338	-823	607	482
New York	10,141	17,664	-13,367	8,151	6,347	-2,750
Ohio	28,161	58,753	-10,844	35,138	25,728	-13,648
Oklahoma	8,115	28,208	22,961	20,970	17,468	-10,345
Oregon	1,076	1,340	783	1,240	552	170
Pennsylvania	52,423	94,422	-59,533	25,003	33,464	-15,621
Texas	24,835	54,826	63,869	24,153	12,557	-22,072
Utah	2,520	8,931	12,955	9,164	4,651	1,416
Washington	1,784	1,566	2,067	1,746	462	1,648
West Virginia	28,818	53,582	-35,844	21,644	19,884	-15,242
Wyoming	2,995	4,376	5,056	3,529	2,903	-272
AGA Regions						
Producing	68,321	159,274	102,555	94,165	79,056	-57,617
Eastern Consuming	253,097	458,719	-179,663	240,936	173,946	-141,841
Western Consuming	37,049	66,259	82,844	39,316	10,566	-3,217
Total	358,466	684,252	5,735	374,417	263,567	-202,675

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1996 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

**Table 14. Activities of Underground Natural Gas Storage Operators, by State,
October 1998**

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	1,752	2,942	-14	-0.8	613	0
Arkansas	31,871	10,909	8,888	19,797	1,241	16.2	616	37
California	396,430	246,951	189,504	436,455	2,446	1.3	24,970	1,044
Colorado	99,600	48,140	40,518	88,658	2,999	8.0	3,113	1,070
Illinois	898,565	649,968	259,176	909,144	-2,719	-1.0	31,748	3,826
Indiana	113,210	73,777	33,408	107,186	-221	-0.7	3,022	118
Iowa	271,200	200,700	65,720	266,420	5,020	8.3	8,730	1,622
Kansas	304,066	190,287	111,969	302,257	17,712	18.8	10,605	1,868
Kentucky	219,908	109,121	105,215	214,336	9,055	9.4	6,146	909
Louisiana	559,013	266,105	257,788	523,893	49,527	23.8	35,798	4,967
Maryland	62,000	46,677	15,031	61,709	589	4.1	1,808	541
Michigan	992,934	420,316	598,155	1,018,471	25,985	4.5	30,229	3,141
Minnesota	7,000	4,623	2,284	6,907	-97	-4.1	187	0
Mississippi	134,012	77,377	56,919	134,296	5,581	10.9	10,992	1,192
Missouri	31,274	21,600	9,642	31,242	175	1.8	214	6
Montana	342,785	167,366	53,044	220,410	1,053	2.0	2,342	811
Nebraska	39,469	31,507	4,970	36,477	406	8.9	451	88
New Mexico	96,600	25,258	9,446	34,703	2,726	40.6	2,578	675
New York	175,479	103,042	75,039	178,080	6,475	9.4	5,467	1,003
Ohio	573,434	352,680	197,141	549,822	13,773	7.5	14,284	1,538
Oklahoma	396,087	234,063	153,592	387,655	36,476	31.1	21,222	1,703
Oregon	11,623	4,666	5,152	9,818	-1,621	-23.9	15	19
Pennsylvania	684,842	354,901	364,208	719,109	15,442	4.4	28,998	8,907
Texas	683,891	253,871	289,854	543,725	69,315	31.4	40,665	6,527
Utah	121,980	64,601	49,042	113,644	8,811	21.9	4,058	179
Washington	37,300	22,096	13,664	35,761	-434	-3.1	721	1,439
West Virginia	734,158	296,487	178,143	474,630	16,927	10.5	9,671	2,577
Wyoming	105,869	60,782	23,230	84,012	93	0.4	1,489	65
AGA Regions								
Producing	2,205,540	1,057,869	888,456	1,946,325	182,577	25.9	122,476	16,969
Eastern Consuming	4,799,753	2,661,966	1,907,603	4,569,569	90,894	5.0	141,381	24,276
Western Consuming	1,122,586	619,226	376,439	995,665	13,250	3.6	36,895	4,626
Total	8,127,879	4,339,061	3,172,498	7,511,559	286,720	9.9	300,753	45,872

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				September	August	July
Alabama	38,304	35,137	44,750	1,196	1,183	1,202
Alaska	10,230	9,732	11,052	818	648	479
Arizona	28,079	23,267	20,254	932	894	1,062
Arkansas	26,517	30,701	34,811	1,067	1,058	1,146
California	414,718	345,939	336,241	22,034	21,621	25,147
Colorado	NA	83,683	80,652	2,690	^R 2,480	NA
Connecticut	26,423	29,284	32,560	937	848	1,028
Delaware	6,102	6,837	7,617	177	165	197
District of Columbia	10,106	11,419	13,055	338	327	371
Florida	12,201	9,524	12,986	626	639	707
Georgia	77,890	71,303	88,066	2,851	2,814	2,956
Hawaii	426	392	416	41	41	45
Idaho	11,379	10,803	10,501	316	292	402
Illinois	276,039	341,758	366,031	10,513	10,437	9,497
Indiana	NA	117,933	127,429	NA	NA	NA
Iowa	49,029	56,991	60,538	1,435	1,453	1,622
Kansas	55,239	48,703	58,377	1,562	1,613	1,783
Kentucky	38,147	43,704	48,015	1,167	1,104	1,321
Louisiana	37,359	38,558	44,841	1,703	1,574	1,774
Maine	639	694	674	27	25	22
Maryland	NA	54,933	62,540	NA	1,854	1,828
Massachusetts	NA	81,698	85,463	NA	2,347	2,842
Michigan	229,952	274,007	289,408	7,533	6,740	7,275
Minnesota	74,367	89,836	98,502	2,683	2,465	2,537
Mississippi	NA	19,808	23,672	NA	NA	^R 714
Missouri	85,125	92,839	100,677	2,619	2,185	2,670
Montana	NA	14,523	15,164	484	488	481
Nebraska	31,445	35,536	35,489	885	1,036	1,014
Nevada	21,795	18,410	16,258	824	813	977
New Hampshire	NA	5,062	5,178	159	NA	169
New Jersey	NA	156,332	163,787	NA	4,528	4,845
New Mexico	23,612	23,095	23,008	840	845	822
New York	NA	275,246	NA	NA	^R 7,468	^R 15,038
North Carolina	39,413	37,379	44,042	963	905	1,044
North Dakota	7,315	8,381	8,887	202	208	235
Ohio	NA	248,660	265,128	5,905	7,246	NA
Oklahoma	51,618	52,584	57,342	1,494	1,430	1,633
Oregon	NA	23,589	23,515	760	679	944
Pennsylvania	NA	185,298	201,680	NA	NA	5,283
Rhode Island	NA	13,530	14,335	436	438	462
South Carolina	20,098	17,997	22,103	491	463	474
South Dakota	8,290	9,592	9,850	248	227	274
Tennessee	NA	44,187	52,310	1,172	1,111	1,186
Texas	151,212	166,841	168,094	5,930	5,810	5,436
Utah	36,633	37,414	36,177	1,913	1,332	1,264
Vermont	1,851	1,954	1,913	114	57	56
Virginia	45,582	51,338	55,001	1,443	1,064	1,425
Washington	NA	39,190	43,747	NA	NA	NA
West Virginia	NA	24,181	27,224	NA	NA	NA
Wisconsin	80,407	92,541	102,101	3,190	3,218	2,415
Wyoming	NA	8,867	9,369	303	331	NA
Total	3,269,773	3,521,208	3,757,589	119,841	^R115,580	^R129,421

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	1,386	2,335	4,610	7,480	9,222	9,689
Alaska	628	933	1,239	1,529	1,716	2,240
Arizona	1,375	2,092	3,694	5,323	5,604	7,103
Arkansas	1,171	1,731	2,270	6,069	6,668	5,336
California	33,207	38,118	54,072	62,006	76,210	82,302
Colorado	1,592	7,546	11,118	15,570	16,176	18,860
Connecticut	1,195	1,878	3,638	5,051	5,585	6,263
Delaware	252	450	846	1,248	1,360	1,408
District of Columbia	435	636	1,195	2,032	2,365	2,409
Florida	817	1,017	1,631	2,044	2,251	2,470
Georgia	3,186	3,558	8,015	16,312	18,031	20,167
Hawaii	47	47	49	49	52	55
Idaho	666	904	1,560	2,032	2,232	2,975
Illinois	11,529	14,790	33,014	54,697	53,146	78,417
Indiana	3,291	5,270	NA	23,358	20,668	26,868
Iowa	1,435	2,807	5,821	10,634	10,261	13,560
Kansas	2,155	3,803	7,378	11,857	11,594	13,494
Kentucky	1,360	1,961	3,937	8,164	8,515	10,618
Louisiana	1,814	2,310	3,736	7,184	7,953	9,311
Maine	31	45	92	120	124	153
Maryland	2,087	2,992	5,696	9,577	11,052	12,609
Massachusetts	NA	NA	10,697	14,514	15,644	16,948
Michigan	9,771	13,888	31,736	47,397	48,977	56,636
Minnesota	2,735	3,836	7,148	16,337	15,023	21,603
Mississippi	^R 796	^R 1,231	^R 2,243	NA	4,564	NA
Missouri	3,128	4,980	10,435	17,763	18,966	22,378
Montana	1,086	NA	1,676	2,429	2,404	3,418
Nebraska	1,199	1,961	4,324	6,482	6,642	7,902
Nevada	1,487	1,884	2,826	3,809	4,149	5,025
New Hampshire	238	378	697	845	1,010	1,140
New Jersey	5,736	11,735	17,514	26,429	29,313	30,800
New Mexico	284	1,270	2,589	4,740	4,337	7,884
New York	NA	NA	30,102	42,752	46,717	^R 53,322
North Carolina	1,192	2,243	5,018	7,535	9,710	10,803
North Dakota	292	490	953	1,464	1,561	1,910
Ohio	8,509	11,550	24,861	44,211	43,910	50,527
Oklahoma	1,855	3,094	5,854	10,832	11,652	13,774
Oregon	1,641	2,135	NA	NA	4,581	6,117
Pennsylvania	6,505	9,880	NA	32,526	34,714	31,526
Rhode Island	622	1,001	NA	2,402	2,720	2,781
South Carolina	562	1,071	2,421	4,006	5,177	5,432
South Dakota	302	512	1,127	1,738	1,666	2,196
Tennessee	1,410	2,674	5,170	9,938	9,546	NA
Texas	^R 6,125	^R 9,148	^R 15,463	^R 28,005	^R 34,096	^R 41,199
Utah	1,958	2,243	4,853	6,482	8,193	8,396
Vermont	77	118	266	340	397	427
Virginia	1,737	2,509	5,172	9,618	11,067	11,546
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	2,785	4,553	4,906	5,039
Wisconsin	3,470	4,080	9,198	17,130	15,618	22,087
Wyoming	503	704	1,182	1,566	1,560	NA
Total	^R 152,469	^R 220,029	^R 406,751	^R 639,059	^R 683,127	^R 803,496

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	48,496	7,942	3,977	1,440	1,254	1,242
Alaska	15,146	2,162	1,684	1,569	743	418
Arizona	31,057	4,764	1,973	1,053	1,124	907
Arkansas	42,428	6,369	4,013	1,345	948	917
California	478,904	68,486	39,940	24,538	21,448	20,643
Colorado	115,583	17,463	10,147	4,290	2,714	2,590
Connecticut	40,562	5,977	3,672	1,629	1,014	914
Delaware	8,972	1,213	671	252	184	179
District of Columbia	15,807	2,421	1,414	553	393	372
Florida	13,117	1,837	1,074	681	631	670
Georgia	114,383	19,892	16,495	6,693	3,158	2,930
Hawaii	517	45	42	39	40	41
Idaho	15,239	2,371	1,427	638	320	294
Illinois	497,230	69,718	56,299	29,455	11,690	10,102
Indiana	169,140	25,914	17,338	7,954	3,467	2,968
Iowa	81,696	12,051	8,606	4,048	1,646	1,479
Kansas	69,415	10,323	8,236	2,153	1,485	1,469
Kentucky	66,033	11,175	8,091	3,063	1,451	1,073
Louisiana	52,709	7,960	4,176	2,016	1,710	1,716
Maine	1,009	142	107	66	30	26
Maryland	77,500	11,130	7,894	3,543	2,067	1,799
Massachusetts	112,308	15,677	10,149	4,784	2,557	2,484
Michigan	379,838	50,037	37,942	17,853	8,775	7,269
Minnesota	128,873	17,435	15,098	6,504	2,542	2,234
Mississippi	27,626	4,355	2,561	902	778	761
Missouri	127,625	19,041	12,090	3,656	2,623	2,401
Montana	21,002	3,207	2,038	1,234	510	449
Nebraska	47,105	5,787	4,399	1,382	936	939
Nevada	25,243	3,884	1,925	1,024	805	781
New Hampshire	6,939	933	616	327	165	155
New Jersey	216,925	31,134	20,208	9,250	5,397	4,726
New Mexico	36,623	8,217	4,095	1,217	836	849
New York	375,641	48,074	34,936	17,385	9,878	10,267
North Carolina	52,894	9,202	4,875	1,438	934	898
North Dakota	11,370	1,423	1,133	434	191	168
Ohio	354,543	50,352	36,474	19,056	7,124	6,112
Oklahoma	71,762	11,025	6,186	1,968	1,549	1,521
Oregon	32,522	4,684	2,713	1,536	829	758
Pennsylvania	262,494	37,709	26,561	12,927	6,214	5,236
Rhode Island	18,162	2,509	1,464	659	473	443
South Carolina	25,741	4,683	2,424	637	471	449
South Dakota	13,203	1,734	1,339	537	261	233
Tennessee	64,130	11,511	6,602	1,829	1,182	1,075
Texas	234,988	37,410	21,561	9,175	7,140	6,789
Utah	58,108	10,376	6,018	4,299	1,957	1,466
Vermont	2,631	345	214	118	59	52
Virginia	73,905	12,127	7,452	2,989	1,630	1,467
Washington	61,813	11,405	7,594	3,623	2,002	1,791
West Virginia	35,996	6,017	4,061	1,737	776	598
Wisconsin	135,819	19,045	16,127	8,106	2,957	2,535
Wyoming	12,999	2,337	1,179	617	320	245
Total	4,983,772	731,030	497,310	234,223	129,388	117,900

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	July	June	May	April	March	February
Alabama	1,397	1,609	2,648	3,191	5,344	9,129
Alaska	463	508	789	1,177	1,767	1,618
Arizona	1,015	1,150	1,566	2,251	4,221	5,075
Arkansas	1,027	1,239	2,322	3,290	4,937	7,745
California	26,444	23,226	28,268	38,704	47,664	65,672
Colorado	2,965	4,130	8,492	10,975	15,768	17,485
Connecticut	961	1,398	2,362	4,435	5,243	6,622
Delaware	195	320	560	948	1,272	1,621
District of Columbia	419	562	944	1,316	2,049	2,655
Florida	709	773	852	914	1,154	1,866
Georgia	3,180	3,341	3,816	8,183	8,959	16,288
Hawaii	43	41	42	41	46	49
Idaho	345	433	938	1,463	1,907	2,540
Illinois	10,370	11,606	26,059	41,167	61,395	69,319
Indiana	2,832	4,924	9,417	15,114	20,542	26,114
Iowa	1,599	2,107	3,939	7,015	9,584	11,951
Kansas	1,688	1,506	3,266	5,839	7,997	11,040
Kentucky	1,499	1,575	2,959	4,893	7,304	8,981
Louisiana	1,746	2,108	2,866	3,648	5,700	9,272
Maine	21	34	56	85	142	133
Maryland	1,906	2,677	4,215	6,912	9,414	11,954
Massachusetts	2,834	4,374	6,937	12,131	15,138	17,795
Michigan	4,751	12,017	26,982	38,297	51,355	57,608
Minnesota	2,385	3,180	6,467	11,143	16,686	19,703
Mississippi	815	926	1,472	1,916	3,058	4,999
Missouri	2,714	3,660	6,460	10,993	15,385	23,276
Montana	413	634	1,147	2,003	2,477	3,025
Nebraska	1,015	1,376	3,176	4,353	6,229	7,825
Nevada	891	985	1,401	2,027	3,187	3,843
New Hampshire	160	263	465	744	913	1,136
New Jersey	5,214	6,599	11,505	20,284	32,686	33,410
New Mexico	820	239	1,965	1,513	3,836	5,668
New York	9,719	14,469	24,082	37,597	51,213	56,003
North Carolina	1,072	1,596	2,986	4,080	5,800	9,983
North Dakota	190	295	688	1,133	1,527	1,931
Ohio	7,425	14,630	21,260	32,544	43,523	51,748
Oklahoma	1,680	2,107	3,860	6,164	9,077	12,696
Oregon	881	1,069	1,883	3,130	4,242	5,128
Pennsylvania	5,254	7,510	15,416	25,082	33,473	41,208
Rhode Island	480	727	1,171	1,994	2,462	2,891
South Carolina	517	709	1,243	1,794	2,619	5,046
South Dakota	248	368	784	1,250	1,625	2,089
Tennessee	1,115	1,652	3,007	4,776	6,666	11,997
Texas	7,599	8,451	11,595	15,606	25,245	36,893
Utah	1,502	1,602	1,821	4,876	5,945	8,367
Vermont	57	97	189	283	383	416
Virginia	1,589	2,042	4,201	6,622	9,068	11,670
Washington	1,995	2,451	4,487	3,680	6,526	7,525
West Virginia	492	952	2,223	3,386	4,273	5,572
Wisconsin	2,862	2,948	7,413	11,047	17,278	19,211
Wyoming	295	397	1,080	1,062	1,550	1,667
Total	127,805	163,591	283,739	433,073	605,856	757,457

^R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				September	August	July
Alabama	22,724	24,276	22,485	1,053	981	1,030
Alaska	16,138	18,530	19,000	1,396	1,208	1,190
Arizona	24,133	22,731	21,518	1,730	1,721	1,890
Arkansas	NA	21,392	23,311	2,129	2,218	2,253
California	226,490	186,186	170,193	26,660	30,322	27,131
Colorado	NA	50,622	50,773	2,714	^R 2,329	NA
Connecticut	31,539	30,458	29,372	2,039	2,178	2,456
Delaware	4,309	4,964	5,094	179	176	190
District of Columbia	13,340	13,385	12,023	837	847	871
Florida	29,364	27,249	31,845	2,501	2,575	2,630
Georgia	42,854	39,498	45,126	2,612	2,649	2,757
Hawaii	1,598	1,398	1,626	171	187	169
Idaho	8,449	8,209	8,180	388	381	407
Illinois	124,506	140,619	148,324	7,349	6,672	5,951
Indiana	NA	57,909	61,853	NA	NA	NA
Iowa	31,638	34,239	38,064	1,194	1,199	1,353
Kansas	33,953	30,096	41,118	1,438	1,836	1,914
Kentucky	23,885	25,880	28,400	1,143	1,134	1,061
Louisiana	NA	19,079	20,237	1,829	1,913	1,799
Maine	1,790	1,874	1,804	78	74	75
Maryland	NA	35,464	33,289	NA	2,147	2,188
Massachusetts	NA	78,845	69,284	NA	3,407	4,054
Michigan	119,962	137,563	146,309	5,790	5,841	5,301
Minnesota	57,097	64,014	67,293	2,747	2,311	2,026
Mississippi	NA	15,884	17,173	NA	NA	^R 1,371
Missouri	47,909	51,350	53,503	2,195	3,039	2,210
Montana	NA	9,794	10,192	407	405	400
Nebraska	21,351	25,731	29,344	935	848	1,070
Nevada	17,411	16,296	14,918	1,090	1,052	1,304
New Hampshire	NA	5,365	5,145	222	NA	228
New Jersey	NA	121,123	111,281	NA	6,079	6,385
New Mexico	22,268	22,179	19,098	1,242	1,214	^R 1,174
New York	NA	237,865	NA	NA	^R 15,604	^R 12,007
North Carolina	29,031	27,170	30,149	1,678	1,650	1,502
North Dakota	8,162	7,843	8,477	1,192	354	285
Ohio	NA	131,268	136,847	4,919	4,070	NA
Oklahoma	34,715	33,298	34,965	1,756	1,812	1,837
Oregon	NA	18,723	18,383	1,028	905	1,047
Pennsylvania	NA	100,940	109,042	4,436	NA	4,607
Rhode Island	NA	9,041	9,388	472	195	484
South Carolina	15,268	13,998	15,080	1,055	1,019	1,013
South Dakota	6,692	7,541	7,978	269	263	283
Tennessee	NA	39,511	42,952	2,527	2,366	2,507
Texas	174,749	158,494	137,480	26,113	25,614	18,195
Utah	20,689	20,770	20,066	1,026	840	845
Vermont	2,138	2,182	2,038	125	100	102
Virginia	43,913	43,722	42,634	2,561	1,971	2,739
Washington	NA	29,457	34,327	NA	NA	NA
West Virginia	NA	18,217	20,511	1,622	1,575	5,166
Wisconsin	58,866	60,668	64,725	4,937	^R 3,410	3,063
Wyoming	NA	8,155	6,032	324	^R 232	NA
Total	2,249,408	2,311,064	2,283,280	158,946	^R160,093	^R152,757

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	1,118	3,768	2,713	3,522	4,010	4,529
Alaska	1,274	1,684	1,911	2,251	2,340	2,883
Arizona	2,073	2,495	3,013	3,548	3,534	4,129
Arkansas	NA	1,432	1,728	3,843	4,075	4,781
California	18,132	22,410	23,269	19,321	28,787	30,457
Colorado	3,415	4,768	6,738	9,008	9,159	10,507
Connecticut	2,151	2,124	4,294	4,999	5,540	5,757
Delaware	226	320	556	829	899	935
District of Columbia	913	1,085	1,830	2,032	2,382	2,542
Florida	2,748	3,112	3,701	3,961	3,984	4,152
Georgia	2,725	3,248	4,882	7,391	8,120	8,471
Hawaii	181	169	174	172	179	196
Idaho	537	689	1,077	1,423	1,570	1,977
Illinois	6,702	6,961	15,326	22,556	22,455	30,533
Indiana	NA	3,258	NA	11,063	10,460	12,876
Iowa	1,237	1,566	3,605	7,584	5,962	7,938
Kansas	1,722	2,093	3,381	8,014	6,177	7,378
Kentucky	1,195	1,505	2,490	4,636	5,053	5,668
Louisiana	NA	1,629	2,048	5,056	4,998	4,511
Maine	90	122	255	332	342	422
Maryland	2,507	2,532	3,668	6,091	6,474	6,659
Massachusetts	5,209	5,789	8,771	11,570	12,943	13,716
Michigan	6,297	8,530	15,784	22,837	23,664	25,919
Minnesota	3,003	3,208	5,685	11,726	11,133	15,257
Mississippi	^R 1,298	^R 1,339	^R 1,789	^R 2,866	3,310	^R 3,264
Missouri	2,352	2,978	5,545	8,978	9,467	11,144
Montana	839	NA	1,029	1,527	1,459	2,178
Nebraska	856	1,690	2,786	4,027	4,237	4,903
Nevada	1,587	1,876	2,207	2,642	2,575	3,078
New Hampshire	NA	375	710	869	1,051	1,167
New Jersey	6,873	10,233	11,748	19,826	18,713	20,200
New Mexico	^R 1,096	^R 1,832	^R 2,727	^R 3,814	^R 3,839	^R 5,330
New York	^R 13,919	NA	20,716	NA	NA	NA
North Carolina	1,658	2,053	3,326	4,879	5,791	6,495
North Dakota	312	507	953	1,372	1,434	1,753
Ohio	5,165	7,134	13,211	21,443	23,991	27,046
Oklahoma	1,826	2,291	4,018	6,347	6,859	7,969
Oregon	1,428	1,618	NA	NA	3,308	3,889
Pennsylvania	4,906	6,114	NA	17,790	19,674	21,571
Rhode Island	495	^R 680	NA	1,492	1,620	1,786
South Carolina	1,063	1,209	1,732	2,440	2,781	2,955
South Dakota	285	539	806	1,335	1,292	1,621
Tennessee	2,646	2,993	4,714	7,027	6,063	NA
Texas	11,161	13,616	14,839	20,104	20,826	24,280
Utah	1,154	1,510	2,749	3,787	4,235	4,544
Vermont	110	116	281	381	436	487
Virginia	2,682	3,672	5,338	7,878	8,398	8,673
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	1,709	2,235	3,146	3,310	3,564
Wisconsin	3,471	3,801	6,632	11,019	9,845	12,688
Wyoming	409	545	^R 861	1,128	1,288	NA
Total	^R 143,098	^R 175,229	^R 254,025	^R 368,772	^R 389,827	^R 446,662

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	32,362	3,743	2,437	1,903	2,075	2,622
Alaska	26,908	3,147	2,658	2,574	1,594	1,340
Arizona	30,284	3,381	2,269	1,751	1,836	1,767
Arkansas	29,443	3,989	2,713	1,347	1,129	1,128
California	256,044	26,978	21,157	19,602	18,459	18,696
Colorado	69,088	9,717	6,177	2,558	2,372	2,118
Connecticut	42,680	5,801	3,854	2,512	1,566	1,762
Delaware	6,610	845	513	286	245	186
District of Columbia	18,018	2,374	1,354	899	852	853
Florida	36,765	3,719	3,112	2,621	2,495	2,589
Georgia	57,227	8,027	6,140	3,554	2,719	2,597
Hawaii	1,751	165	37	152	148	143
Idaho	11,469	1,657	982	585	411	356
Illinois	202,871	27,076	22,863	12,292	6,426	5,809
Indiana	81,813	10,689	8,637	4,518	2,175	2,070
Iowa	50,194	7,208	5,707	3,037	1,359	1,114
Kansas	41,238	5,532	3,673	1,936	1,567	1,999
Kentucky	38,632	6,154	4,176	2,417	1,249	948
Louisiana	25,629	3,073	2,048	1,414	1,353	1,307
Maine	2,713	375	289	176	91	78
Maryland	49,859	6,536	4,962	2,839	2,283	2,070
Massachusetts	105,818	11,523	8,546	6,898	5,365	5,635
Michigan	192,300	25,857	19,047	9,791	5,997	5,688
Minnesota	92,263	12,318	10,721	5,179	2,408	2,369
Mississippi	22,073	2,934	2,028	1,224	924	1,309
Missouri	69,869	9,547	6,192	2,741	2,195	2,063
Montana	13,926	2,014	1,306	797	425	385
Nebraska	33,853	3,454	2,812	1,855	1,477	2,295
Nevada	22,024	2,580	1,806	1,276	1,198	1,151
New Hampshire	7,489	1,010	703	411	249	217
New Jersey	168,761	23,161	16,022	8,454	7,142	6,699
New Mexico	31,501	4,831	2,949	1,384	1,206	1,185
New York	321,447	34,705	27,141	21,151	17,307	18,574
North Carolina	38,021	5,508	3,434	1,908	1,713	1,592
North Dakota	10,875	1,339	1,129	559	317	264
Ohio	184,103	25,092	17,752	9,727	4,948	4,355
Oklahoma	45,195	6,049	3,675	2,064	1,764	1,733
Oregon	25,500	3,352	2,023	1,367	1,026	915
Pennsylvania	144,134	19,731	14,064	9,348	5,000	4,248
Rhode Island	12,306	1,413	1,212	637	460	399
South Carolina	19,561	2,638	1,757	1,167	1,884	1,004
South Dakota	10,426	1,311	1,021	549	334	249
Tennessee	55,130	7,939	5,015	2,653	2,078	1,921
Texas	216,347	24,323	19,327	14,189	14,479	14,856
Utah	31,257	5,152	3,187	2,020	1,124	943
Vermont	3,051	403	282	184	108	80
Virginia	61,932	9,233	5,543	3,397	2,334	2,476
Washington	46,802	6,666	7,903	2,660	2,041	1,625
West Virginia	25,918	3,386	2,809	1,500	1,106	1,137
Wisconsin	88,783	12,473	10,180	5,408	2,738	2,806
Wyoming	10,767	1,077	967	555	316	287
Total	3,223,030	411,204	306,311	190,027	142,068	140,017

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	July	June	May	April	March	February
Alabama	2,947	1,642	1,901	2,089	2,623	4,120
Alaska	1,404	1,428	1,813	2,225	2,861	2,529
Arizona	1,936	1,973	2,138	2,559	3,148	3,520
Arkansas	1,127	1,214	1,647	2,166	3,142	4,724
California	17,911	16,438	18,750	20,672	23,521	25,728
Colorado	2,354	2,955	4,847	6,434	8,355	10,201
Connecticut	2,145	2,237	2,658	4,075	4,820	5,372
Delaware	209	285	427	638	871	1,062
District of Columbia	783	951	1,373	1,739	2,183	2,316
Florida	2,516	2,851	2,837	2,950	3,227	3,765
Georgia	2,677	2,776	3,192	4,136	4,853	7,940
Hawaii	156	152	148	155	160	168
Idaho	373	399	686	1,041	1,345	1,784
Illinois	5,970	6,052	10,472	16,533	23,087	29,599
Indiana	1,943	3,992	6,203	6,471	9,135	11,616
Iowa	1,305	1,238	2,382	3,878	5,789	7,031
Kansas	2,452	1,549	2,113	3,188	4,707	6,465
Kentucky	1,157	1,166	1,863	2,878	4,049	5,429
Louisiana	1,474	1,530	1,616	1,933	2,521	3,713
Maine	72	92	152	231	378	348
Maryland	2,237	2,315	2,744	4,240	5,681	6,291
Massachusetts	5,442	7,023	6,215	9,133	11,697	13,959
Michigan	2,213	7,417	12,843	18,737	25,036	27,780
Minnesota	2,343	2,801	4,949	8,161	11,915	13,282
Mississippi	1,206	1,174	1,306	1,533	2,114	3,076
Missouri	2,169	2,459	3,556	5,761	7,934	12,749
Montana	365	453	718	1,349	1,634	1,958
Nebraska	4,067	1,309	2,093	2,520	3,330	3,925
Nevada	1,103	1,416	1,700	1,906	2,455	2,643
New Hampshire	216	286	472	739	954	1,110
New Jersey	7,213	8,127	11,571	16,399	24,061	15,701
New Mexico	1,166	1,093	2,065	2,170	3,517	4,741
New York	21,119	20,942	21,767	28,346	34,051	38,410
North Carolina	1,513	1,741	2,260	2,909	3,731	5,747
North Dakota	141	315	590	1,062	1,373	1,840
Ohio	4,100	8,641	11,246	15,105	23,116	28,057
Oklahoma	1,732	1,570	2,622	3,668	5,151	7,287
Oregon	1,011	1,071	1,579	2,312	3,086	3,698
Pennsylvania	4,661	5,408	9,952	12,750	17,530	19,262
Rhode Island	431	537	892	1,144	1,740	1,744
South Carolina	990	1,096	1,268	1,202	1,794	2,381
South Dakota	246	283	603	940	1,235	1,606
Tennessee	1,944	2,350	3,155	4,177	5,559	9,263
Texas	16,420	13,384	14,126	15,195	20,886	22,457
Utah	927	945	1,268	2,675	3,363	4,473
Vermont	80	108	160	296	429	444
Virginia	2,395	2,700	4,304	5,671	7,141	7,992
Washington	1,831	2,240	3,161	3,196	4,443	4,971
West Virginia	927	1,093	1,599	2,116	2,772	3,612
Wisconsin	2,631	2,712	5,242	6,917	10,587	11,651
Wyoming	624	491	959	1,190	1,405	1,311
Total	144,372	154,422	204,203	269,510	360,492	420,853

^R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Deliveries for total year 1996 may not equal the sum of the twelve months. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				September	August	July
Alabama	153,004	147,557	149,349	15,399	17,248	16,167
Alaska	NA	54,908	55,711	NA	NA	6,542
Arizona	20,693	20,505	19,644	2,078	2,508	2,307
Arkansas	109,478	109,370	104,569	11,836	11,799	11,321
California	543,165	551,254	515,614	65,490	64,310	59,188
Colorado	NA	55,028	63,400	4,230	NA	NA
Connecticut	24,429	25,649	22,944	2,417	2,455	2,271
Delaware	11,788	10,683	10,498	1,182	1,221	1,097
District of Columbia	0	0	0	0	0	0
Florida	105,550	98,412	102,976	11,553	10,827	11,384
Georgia	113,622	134,888	134,417	8,274	13,484	12,768
Hawaii	0	0	0	0	0	0
Idaho ^a	26,120	25,506	25,916	2,701	2,530	2,620
Illinois	223,599	234,274	231,135	21,840	20,413	20,256
Indiana	NA	210,413	215,728	NA	NA	NA
Iowa	81,817	77,446	82,402	7,469	7,741	7,647
Kansas	82,000	83,817	83,711	7,312	10,790	11,626
Kentucky	67,761	69,267	68,575	6,695	6,702	6,738
Louisiana	716,879	749,704	783,026	84,209	85,378	80,693
Maine	1,521	1,762	1,545	190	179	153
Maryland	NA	43,631	36,889	NA	4,000	3,779
Massachusetts	NA	83,231	72,701	NA	8,134	7,812
Michigan	226,382	251,368	259,173	18,483	17,707	18,191
Minnesota	72,218	77,876	72,676	4,187	8,677	7,803
Mississippi	NA	61,591	60,514	7,663	NA	NA
Missouri	49,054	52,764	53,903	4,581	4,658	4,672
Montana	12,813	13,091	12,896	1,206	1,126	1,215
Nebraska	28,395	32,980	26,009	786	4,050	5,853
Nevada	19,981	21,767	24,494	1,793	2,739	2,458
New Hampshire	NA	4,421	3,512	476	NA	438
New Jersey	NA	152,656	141,123	NA	15,840	15,601
New Mexico	29,437	30,914	17,010	3,805	3,556	^R 3,536
New York	NA	231,076	239,034	NA	NA	NA
North Carolina	86,679	81,680	74,380	8,986	9,283	8,561
North Dakota	7,647	15,523	5,347	791	711	729
Ohio	NA	248,494	256,365	24,368	23,492	NA
Oklahoma	149,117	158,495	149,199	19,543	18,236	16,672
Oregon	NA	63,620	62,073	8,452	6,988	NA
Pennsylvania	173,406	176,823	180,518	17,892	17,882	17,111
Rhode Island	NA	18,637	17,095	1,963	2,126	2,121
South Carolina	77,708	76,780	69,312	8,475	8,389	7,613
South Dakota	4,089	5,279	5,250	411	440	416
Tennessee	NA	103,106	91,214	12,499	12,815	11,939
Texas	1,434,478	1,553,834	1,603,420	151,722	164,970	181,812
Utah	34,571	31,339	31,264	3,192	3,040	3,424
Vermont	1,543	1,650	1,377	154	135	153
Virginia	70,153	64,053	61,021	8,135	9,453	9,466
Washington	NA	79,197	82,958	NA	NA	NA
West Virginia	NA	42,714	36,826	NA	NA	NA
Wisconsin	103,770	113,847	107,425	10,713	10,267	7,967
Wyoming	NA	34,686	36,187	3,897	NA	NA
Total	6,326,034	6,587,569	6,562,330	666,216	686,233	^R 684,497

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	16,737	17,308	17,013	18,208	16,441	18,483
Alaska	6,251	5,854	6,455	6,878	6,152	6,454
Arizona	2,034	2,313	2,281	2,413	2,226	2,533
Arkansas	11,102	11,839	12,765	13,363	12,114	13,339
California	53,880	66,080	55,492	47,185	67,501	64,039
Colorado	NA	5,649	6,278	6,323	6,388	6,949
Connecticut	2,225	2,546	2,782	3,183	3,149	3,402
Delaware	1,160	1,256	1,348	1,477	1,443	1,604
District of Columbia	0	0	0	0	0	0
Florida	11,469	11,765	11,608	12,960	11,053	12,931
Georgia	13,149	12,501	12,866	13,434	13,335	13,808
Hawaii	0	0	0	0	0	0
Idaho ^a	2,672	2,593	3,047	3,130	3,482	3,344
Illinois	20,738	22,462	26,752	29,211	28,719	33,208
Indiana	23,465	23,136	NA	27,772	25,847	28,857
Iowa	7,574	8,097	10,660	11,792	9,516	11,321
Kansas	9,583	8,483	8,011	8,686	7,811	9,699
Kentucky	6,787	7,022	7,543	8,884	7,550	9,839
Louisiana	73,666	75,577	77,970	81,959	74,500	82,928
Maine	184	168	122	159	164	202
Maryland	3,622	4,047	4,407	11,276	10,677	13,699
Massachusetts	NA	7,635	8,209	8,759	8,443	9,923
Michigan	22,705	25,012	26,873	32,052	31,380	33,980
Minnesota	7,847	6,901	8,548	9,039	10,044	9,171
Mississippi	NA	NA	NA	NA	6,814	NA
Missouri	4,646	4,830	5,473	6,788	6,360	7,047
Montana	1,687	1,244	1,521	1,481	1,449	1,884
Nebraska	3,076	2,662	2,543	3,043	2,902	3,481
Nevada	2,337	2,455	2,453	2,174	1,979	1,593
New Hampshire	431	473	457	468	498	481
New Jersey	14,727	15,723	16,455	17,152	17,655	18,980
New Mexico	^R 3,179	^R 3,131	^R 3,190	^R 2,891	^R 2,895	^R 3,254
New York	^R 21,404	NA	22,542	26,423	NA	NA
North Carolina	9,042	9,439	9,366	10,846	10,404	10,752
North Dakota	771	773	898	1,017	948	1,010
Ohio	24,008	25,977	29,362	32,257	31,779	35,912
Oklahoma	16,280	13,793	14,388	16,578	17,131	16,497
Oregon	6,767	7,015	NA	NA	8,744	9,760
Pennsylvania	17,926	18,161	19,808	21,699	20,811	22,115
Rhode Island	2,042	NA	2,078	2,117	2,011	2,173
South Carolina	8,464	8,713	8,159	9,121	9,129	9,645
South Dakota	307	697	279	474	500	565
Tennessee	11,714	11,710	12,020	14,188	12,628	NA
Texas	150,210	154,540	153,724	159,503	148,544	169,452
Utah	3,678	3,668	4,480	4,273	4,080	4,735
Vermont	152	164	164	194	205	223
Virginia	8,290	6,375	7,746	6,497	7,444	6,747
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	4,099	4,553	1,696	4,510
Wisconsin	9,204	9,508	11,658	14,819	13,298	16,337
Wyoming	4,119	4,293	3,344	NA	NA	5,156
Total	^R 644,397	^R 668,754	^R 695,045	^R 749,842	^R 731,232	^R 799,818

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	201,240	19,049	17,956	16,677	15,298	15,537
Alaska	73,599	6,851	5,551	6,290	4,218	6,373
Arizona	27,864	2,678	2,352	2,329	2,576	2,369
Arkansas	147,969	13,294	12,753	12,551	11,111	12,082
California	737,354	64,122	63,615	58,363	68,290	68,738
Colorado	73,781	7,037	6,542	5,174	4,717	6,458
Connecticut	34,554	3,438	2,840	2,627	2,378	2,549
Delaware	14,805	1,599	1,331	1,193	1,114	1,009
District of Columbia	0	0	0	0	0	0
Florida	130,816	11,157	10,619	10,628	10,448	10,872
Georgia	174,747	13,568	12,922	13,369	12,457	13,862
Hawaii	342	342	0	0	0	0
Idaho ^a	34,999	3,158	3,109	3,226	2,756	2,371
Illinois	317,755	30,894	27,921	24,667	22,090	20,598
Indiana	290,723	27,648	28,003	24,659	21,620	20,894
Iowa	107,463	10,549	9,896	9,571	8,083	8,285
Kansas	112,089	11,682	8,483	8,107	7,599	8,302
Kentucky	95,724	9,220	8,729	8,508	6,879	6,862
Louisiana	1,004,383	84,522	82,180	87,977	83,556	86,060
Maine	2,525	218	299	246	211	193
Maryland	65,954	13,535	4,361	4,427	4,406	5,041
Massachusetts	108,295	8,984	8,165	7,916	7,449	8,618
Michigan	338,456	33,117	28,965	25,006	23,949	24,022
Minnesota	107,338	10,132	10,200	9,130	7,261	8,379
Mississippi	83,967	7,562	7,751	7,063	5,976	6,650
Missouri	71,164	6,842	6,397	5,161	4,392	4,336
Montana	18,766	2,120	1,900	1,656	1,325	1,287
Nebraska	44,418	5,064	2,736	3,638	2,797	3,505
Nevada	28,925	2,330	2,316	2,512	2,528	2,521
New Hampshire	5,830	468	442	499	463	451
New Jersey	202,418	18,335	15,921	15,505	14,356	18,611
New Mexico	40,854	3,528	3,319	3,092	3,258	3,217
New York	305,521	26,822	26,731	20,891	25,050	22,613
North Carolina	111,513	9,830	10,055	9,948	8,313	8,157
North Dakota	20,580	1,975	1,525	1,556	1,518	1,593
Ohio	335,993	31,923	29,457	26,118	23,913	23,310
Oklahoma	206,677	16,693	15,943	15,546	16,738	17,677
Oregon	90,403	9,751	8,789	8,242	8,019	8,218
Pennsylvania	238,220	21,967	21,958	17,472	16,814	17,511
Rhode Island	24,472	2,179	2,148	1,509	1,440	1,491
South Carolina	102,929	9,226	8,685	8,238	8,832	8,184
South Dakota	6,928	606	618	424	470	499
Tennessee	138,877	12,776	11,768	11,228	10,408	12,556
Texas	2,058,755	169,958	167,175	167,787	165,238	174,495
Utah	44,162	4,492	4,116	4,216	2,488	3,361
Vermont	2,334	235	226	223	176	157
Virginia	85,264	8,128	7,094	5,989	6,911	9,236
Washington	111,159	12,255	10,247	9,459	10,909	10,178
West Virginia	57,380	5,201	4,824	4,640	4,515	4,616
Wisconsin	155,677	15,154	14,492	12,184	10,289	9,734
Wyoming	46,936	4,066	4,296	3,889	3,285	3,833
Total	8,842,896	796,281	747,720	711,325	688,885	717,470

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	July	June	May	April	March	February
Alabama	14,984	15,862	17,051	17,881	16,890	16,479
Alaska	5,948	5,893	5,598	6,420	6,968	6,425
Arizona	2,240	2,174	2,336	2,091	2,354	2,133
Arkansas	11,872	11,684	11,991	12,097	12,445	12,270
California	66,660	59,353	57,369	57,182	57,146	55,888
Colorado	4,912	6,073	6,278	5,736	7,425	6,650
Connecticut	2,444	2,444	2,878	3,318	3,536	3,026
Delaware	1,096	1,147	1,301	1,352	1,242	1,185
District of Columbia	0	0	0	0	0	0
Florida	10,607	10,621	11,537	11,506	11,075	10,504
Georgia	13,233	12,135	16,473	17,034	16,629	17,303
Hawaii	0	0	0	0	0	0
Idaho ^a	2,635	2,724	2,673	3,180	3,200	2,802
Illinois	22,236	22,534	25,392	26,558	29,871	31,761
Indiana	20,324	17,709	20,338	24,261	27,581	26,893
Iowa	7,409	7,489	8,159	8,785	9,405	9,475
Kansas	12,164	8,674	8,540	9,183	9,220	8,559
Kentucky	6,341	6,457	7,556	7,603	8,241	8,880
Louisiana	81,897	83,336	84,944	83,486	83,322	78,853
Maine	157	199	228	249	184	162
Maryland	4,765	5,178	4,872	4,468	5,775	4,829
Massachusetts	8,696	10,308	7,856	10,239	10,327	10,233
Michigan	15,926	25,902	28,281	29,068	34,268	34,021
Minnesota	8,154	7,724	7,623	8,561	10,471	10,247
Mississippi	6,989	6,559	6,150	6,990	7,216	7,180
Missouri	4,611	4,784	5,083	7,278	5,435	9,586
Montana	1,122	1,208	1,402	1,210	1,767	1,703
Nebraska	1,717	3,334	3,514	4,583	4,658	4,509
Nevada	2,353	2,335	2,625	2,208	2,491	2,241
New Hampshire	428	451	559	638	576	442
New Jersey	14,648	14,516	15,097	17,337	19,610	19,723
New Mexico	3,447	3,355	3,490	3,181	3,196	3,483
New York	24,246	23,418	24,289	26,049	29,294	29,012
North Carolina	8,382	8,873	9,043	9,764	9,738	9,574
North Dakota	1,362	1,621	1,599	1,806	2,299	2,006
Ohio	21,999	28,629	25,952	26,354	30,215	32,153
Oklahoma	16,664	17,580	17,354	17,384	17,264	18,857
Oregon	7,240	5,515	6,070	6,402	6,841	6,716
Pennsylvania	16,838	16,471	18,876	21,649	21,951	23,188
Rhode Island	2,159	2,265	2,401	2,514	2,241	1,993
South Carolina	7,967	8,568	9,111	9,069	9,012	7,897
South Dakota	322	460	531	624	705	791
Tennessee	10,581	10,591	9,665	12,484	11,889	12,864
Texas	168,624	168,087	170,594	167,379	188,635	162,820
Utah	3,473	3,398	3,623	3,746	3,769	3,685
Vermont	144	146	218	199	234	196
Virginia	8,535	6,165	7,401	6,362	4,015	7,780
Washington	7,788	7,709	8,184	7,891	8,923	8,836
West Virginia	4,480	4,393	4,990	7,557	2,912	4,318
Wisconsin	9,244	9,672	11,545	13,885	15,950	15,228
Wyoming	3,218	3,837	4,101	3,843	3,773	3,771
Total	683,279	689,559	712,740	738,645	782,185	759,129

^a Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components. Deliveries for total year 1995 in Idaho do not equal the sum of the twelve months.

^R = Revised Data.

^{NA} = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				September	August	July
Alabama	23,221	8,768	4,991	4,214	5,130	5,072
Alaska	20,889	25,149	23,369	2,392	2,030	2,154
Arizona	27,448	20,691	16,267	6,201	8,186	6,792
Arkansas	38,676	21,843	32,264	6,824	8,248	7,084
California	208,010	294,099	245,499	31,817	34,626	26,022
Colorado	8,092	4,060	4,232	1,543	1,419	1,739
Connecticut	10,380	12,528	7,770	1,606	2,673	1,582
Delaware	8,088	14,356	17,862	1,319	1,673	1,648
District of Columbia	0	0	0	0	0	0
Florida	217,327	239,905	223,848	27,475	29,258	31,976
Georgia	19,976	6,862	4,542	3,350	5,026	5,455
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	52,440	31,887	22,409	6,137	7,737	7,707
Indiana	8,866	4,031	3,694	1,066	1,829	2,084
Iowa	5,662	3,205	2,811	1,134	1,083	965
Kansas	32,796	18,710	20,550	6,370	7,339	8,026
Kentucky	5,269	1,646	1,585	978	1,060	650
Louisiana	254,862	224,075	205,383	36,598	44,645	43,685
Maine	0	0	0	0	0	0
Maryland	11,386	9,685	7,495	2,566	3,147	2,186
Massachusetts	16,046	42,658	31,747	1,130	1,970	1,407
Michigan	37,955	23,881	23,815	5,437	5,545	4,573
Minnesota	6,950	5,465	4,010	1,563	1,483	1,410
Mississippi	63,692	59,023	67,626	8,142	11,127	10,889
Missouri	14,802	6,258	4,722	3,068	4,002	3,753
Montana	404	329	271	69	83	80
Nebraska	4,850	2,191	2,052	974	1,185	1,046
Nevada	43,415	41,962	37,731	6,460	8,819	8,189
New Hampshire	124	503	2	0	26	37
New Jersey	29,162	25,557	22,861	3,447	6,217	7,107
New Mexico	32,078	25,929	22,515	3,783	4,850	4,218
New York	173,488	174,807	112,406	20,469	34,234	29,304
North Carolina	12,220	3,977	2,266	2,132	3,116	2,042
North Dakota	0	1	3	0	0	0
Ohio	6,863	2,722	2,446	1,332	1,424	1,306
Oklahoma	138,667	99,122	112,867	21,198	26,923	26,857
Oregon	16,787	6,699	9,342	2,814	3,781	3,008
Pennsylvania	6,205	6,494	5,653	560	455	1,409
Rhode Island	15,593	19,567	18,031	0	2,251	2,238
South Carolina	5,683	2,343	1,147	919	1,238	1,239
South Dakota	2,426	1,513	605	366	608	627
Tennessee	6,024	1,427	571	1,860	1,123	1,407
Texas	1,016,013	823,709	853,351	143,056	161,305	174,175
Utah	4,112	3,595	3,024	1,071	1,175	1,000
Vermont	173	26	15	11	8	15
Virginia	17,580	9,636	9,276	3,324	3,647	2,970
Washington	7,658	2,047	5,410	2,749	3,470	621
West Virginia	284	188	158	20	34	53
Wisconsin	14,566	14,165	5,226	2,047	2,341	3,064
Wyoming	248	59	68	9	1	5
Total	2,647,451	2,347,356	2,203,789	379,598	457,551	448,875

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	4,764	2,844	296	383	157	362
Alaska	2,093	2,411	2,266	2,382	2,307	2,852
Arizona	1,986	674	1,127	718	804	962
Arkansas	6,676	5,479	2,283	1,521	272	289
California	15,338	13,745	18,055	23,374	18,278	26,755
Colorado	901	656	586	416	451	381
Connecticut	1,709	1,386	157	23	109	1,136
Delaware	1,196	900	548	475	74	256
District of Columbia	0	0	0	0	0	0
Florida	33,192	26,827	15,860	18,020	15,637	19,082
Georgia	4,958	746	98	183	57	102
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,387	7,068	4,835	4,022	3,535	4,014
Indiana	1,878	1,187	205	426	104	87
Iowa	774	697	298	245	202	264
Kansas	5,333	3,207	594	935	446	545
Kentucky	950	1,017	107	282	138	86
Louisiana	38,810	31,812	18,082	16,198	9,860	15,171
Maine	0	0	0	0	0	0
Maryland	1,396	932	373	371	223	191
Massachusetts	2,169	2,666	1,579	1,565	1,320	2,241
Michigan	5,093	4,212	3,602	3,758	2,496	3,239
Minnesota	994	804	268	204	105	119
Mississippi	10,630	8,717	4,400	3,921	2,775	3,092
Missouri	2,440	952	210	161	80	135
Montana	26	89	15	39	0	1
Nebraska	719	634	176	59	21	37
Nevada	4,036	3,761	3,549	2,446	3,128	3,027
New Hampshire	35	0	0	0	26	0
New Jersey	4,303	3,926	1,380	1,835	419	528
New Mexico	4,019	4,948	3,448	3,092	1,802	1,918
New York	24,084	18,926	9,076	10,397	10,274	16,724
North Carolina	3,789	1,026	12	91	1	11
North Dakota	0	0	0	0	0	0
Ohio	1,102	1,005	178	307	96	114
Oklahoma	20,792	13,893	7,944	9,394	5,205	6,460
Oregon	835	176	2,266	1,335	1,102	1,471
Pennsylvania	2,013	621	260	406	257	225
Rhode Island	1,453	1,943	1,606	1,889	1,599	2,613
South Carolina	1,413	687	37	106	11	33
South Dakota	315	366	33	42	6	63
Tennessee	1,202	432	0	0	0	0
Texas	153,171	117,366	83,043	80,475	49,071	54,351
Utah	141	138	135	156	144	153
Vermont	7	12	6	3	47	65
Virginia	2,254	2,158	699	1,197	476	853
Washington	33	14	152	121	5	492
West Virginia	46	30	22	29	29	21
Wisconsin	2,557	2,282	395	1,108	353	418
Wyoming	10	6	8	3	200	7
Total	379,024	293,378	190,266	194,113	133,700	170,946

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	9,997	87	295	846	1,247	2,373
Alaska	33,510	3,013	2,668	2,680	2,289	2,432
Arizona	23,385	752	399	1,542	5,103	4,808
Arkansas	24,805	294	375	2,293	3,376	5,269
California	377,946	26,274	22,422	35,151	56,539	48,248
Colorado	5,536	450	385	641	667	716
Connecticut	16,761	554	1,446	2,234	1,722	2,300
Delaware	16,092	699	681	356	667	1,592
District of Columbia	0	0	0	0	0	0
Florida	296,903	21,491	14,278	21,229	27,022	33,982
Georgia	7,342	49	124	308	1,159	2,199
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	44,607	5,018	3,906	3,795	2,375	3,807
Indiana	4,661	137	211	281	242	478
Iowa	4,124	208	252	459	235	373
Kansas	25,822	1,991	2,478	2,643	2,111	3,489
Kentucky	2,194	158	190	200	181	311
Louisiana	277,438	16,781	14,535	22,047	30,516	34,790
Maine	0	0	0	0	0	0
Maryland	11,007	209	364	749	623	1,051
Massachusetts	51,490	2,411	3,176	3,245	4,785	5,579
Michigan	33,287	3,028	3,135	3,242	2,922	2,852
Minnesota	6,098	112	139	382	289	669
Mississippi	73,083	4,573	4,060	5,428	8,115	11,934
Missouri	7,465	310	340	557	749	1,211
Montana	420	21	30	40	27	46
Nebraska	2,656	34	77	354	263	364
Nevada	51,777	3,648	1,803	4,364	6,209	7,830
New Hampshire	564	34	26	0	60	77
New Jersey	29,534	552	1,340	2,085	1,349	4,238
New Mexico	33,375	1,998	2,224	3,224	2,834	4,337
New York	217,504	14,287	12,326	16,084	19,134	28,915
North Carolina	4,512	3	25	507	433	747
North Dakota	1	0	0	0	0	0
Ohio	3,486	122	245	396	268	303
Oklahoma	128,818	11,401	8,233	10,061	14,023	20,503
Oregon	10,680	1,917	1,075	990	2,765	2,957
Pennsylvania	7,370	365	212	301	417	923
Rhode Island	27,160	2,602	2,488	2,503	2,364	2,423
South Carolina	2,731	35	112	240	212	422
South Dakota	1,731	83	90	45	88	228
Tennessee	1,636	0	0	209	0	328
Texas	1,056,550	69,566	72,391	90,883	126,044	141,896
Utah	4,078	177	173	134	906	1,080
Vermont	36	4	2	4	2	4
Virginia	11,572	851	353	732	541	1,369
Washington	2,618	187	220	164	1,191	731
West Virginia	219	11	2	17	15	9
Wisconsin	15,776	467	400	743	697	895
Wyoming	95	15	15	5	5	3
Total	2,968,453	196,980	179,723	244,394	332,781	391,090

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1997					
	July	June	May	April	March	February
Alabama	2,901	931	483	386	168	156
Alaska	2,729	2,574	2,897	2,917	3,584	2,514
Arizona	4,117	1,932	2,742	723	588	358
Arkansas	7,491	3,445	576	606	247	214
California	43,993	26,550	37,246	25,416	24,349	14,231
Colorado	704	337	394	265	323	259
Connecticut	2,412	1,364	1,139	1,227	965	1,206
Delaware	2,002	1,097	1,064	1,841	2,279	2,069
District of Columbia	0	0	0	0	0	0
Florida	33,658	31,546	29,444	27,857	28,937	16,983
Georgia	2,595	440	204	177	30	18
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,989	4,591	2,901	4,925	2,449	1,662
Indiana	1,683	718	210	199	219	136
Iowa	843	395	272	256	364	219
Kansas	6,353	3,143	1,238	847	563	413
Kentucky	525	170	21	117	130	80
Louisiana	39,934	29,946	25,567	19,111	15,859	13,605
Maine	0	0	0	0	0	0
Maryland	3,382	1,857	726	1,478	336	47
Massachusetts	6,021	6,210	3,814	6,615	5,276	2,786
Michigan	3,680	2,756	2,752	2,265	2,395	2,357
Minnesota	1,136	685	595	620	693	123
Mississippi	14,013	8,386	4,689	3,034	2,930	2,716
Missouri	2,792	1,022	95	174	77	52
Montana	116	8	7	15	18	27
Nebraska	879	218	108	172	79	77
Nevada	7,264	5,272	5,219	3,518	3,819	1,362
New Hampshire	12	353	0	0	0	0
New Jersey	8,150	4,613	1,479	1,868	2,091	1,023
New Mexico	4,025	2,923	2,445	2,548	2,767	1,990
New York	36,082	29,210	17,438	12,102	14,764	12,342
North Carolina	1,888	811	61	26	1	9
North Dakota	1	0	0	0	0	0
Ohio	1,073	596	106	107	72	71
Oklahoma	20,874	12,256	6,716	7,026	6,647	4,845
Oregon	358	147	3	0	172	0
Pennsylvania	2,725	886	295	326	324	316
Rhode Island	2,005	2,185	2,447	1,854	2,179	2,021
South Carolina	922	621	67	72	12	4
South Dakota	582	360	85	85	39	19
Tennessee	844	255	0	0	0	0
Texas	144,621	103,332	73,259	59,315	60,360	54,882
Utah	819	25	146	142	180	137
Vermont	4	3	3	3	3	2
Virginia	2,863	1,508	622	1,389	1,125	43
Washington	25	1	86	5	0	2
West Virginia	23	40	33	9	23	23
Wisconsin	2,171	1,688	1,854	1,770	2,146	1,774
Wyoming	4	13	6	6	6	7
Total	429,286	297,424	231,548	193,416	189,590	143,185

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				September	August	July
Alabama	237,253	215,739	221,575	21,861	24,543	23,472
Alaska	NA	108,319	109,131	NA	NA	10,365
Arizona	100,353	87,194	77,684	10,941	13,310	12,051
Arkansas	NA	183,305	194,954	21,855	23,323	21,804
California	1,392,383	1,377,478	1,267,548	146,002	150,879	137,488
Colorado	NA	193,392	199,057	11,177	^R 7,832	NA
Connecticut	92,771	97,918	92,647	6,999	8,154	7,337
Delaware	30,287	36,840	41,071	2,857	3,234	3,131
District of Columbia	23,446	24,804	25,078	1,176	1,174	1,242
Florida	364,442	375,090	371,656	42,155	43,299	46,698
Georgia	254,341	252,552	272,152	17,087	23,973	23,937
Hawaii	2,025	1,790	2,042	212	228	214
Idaho	45,947	44,518	44,597	3,405	3,203	3,429
Illinois	676,584	748,537	767,898	45,838	45,258	43,411
Indiana	NA	390,287	408,704	NA	NA	NA
Iowa	168,146	171,882	183,816	11,231	11,476	11,588
Kansas	203,988	181,325	203,756	16,681	21,579	23,349
Kentucky	135,061	140,497	146,576	9,983	10,000	9,770
Louisiana	NA	1,031,416	1,053,487	124,339	133,511	127,951
Maine	3,949	4,330	4,024	295	278	251
Maryland	NA	143,713	140,214	NA	11,149	9,982
Massachusetts	NA	286,432	259,195	NA	15,857	16,115
Michigan	614,251	686,819	718,705	37,242	35,834	35,339
Minnesota	210,633	237,192	242,481	11,180	14,937	13,777
Mississippi	NA	156,306	168,986	NA	NA	^R 18,767
Missouri	196,890	203,211	212,806	12,463	13,884	13,305
Montana	35,431	37,737	38,523	2,167	2,102	2,176
Nebraska	86,041	96,439	92,894	3,579	7,119	8,983
Nevada	102,602	98,436	93,400	10,166	13,422	12,929
New Hampshire	NA	15,352	13,838	857	NA	871
New Jersey	NA	455,669	439,053	NA	32,664	33,937
New Mexico	107,395	102,116	81,631	9,670	10,466	^R 9,749
New York	NA	918,995	NA	NA	^R 76,920	^R 79,590
North Carolina	167,344	150,206	150,837	13,759	14,954	13,149
North Dakota	23,125	31,748	22,715	2,186	1,272	1,249
Ohio	NA	631,144	660,786	36,523	36,233	NA
Oklahoma	374,117	343,500	354,372	43,991	48,401	47,000
Oregon	NA	112,631	113,313	13,053	12,354	NA
Pennsylvania	NA	469,555	496,893	NA	NA	28,410
Rhode Island	NA	60,774	58,850	2,871	5,009	5,305
South Carolina	118,756	111,118	107,642	10,940	11,109	10,339
South Dakota	21,498	23,925	23,683	1,294	1,539	1,600
Tennessee	NA	188,231	187,047	18,058	17,415	17,040
Texas	2,776,452	2,702,879	2,762,345	326,821	357,700	379,619
Utah	96,005	93,118	90,531	7,201	6,387	6,533
Vermont	5,705	5,812	5,344	403	301	325
Virginia	177,227	168,749	167,932	15,463	16,135	16,601
Washington	NA	149,891	166,442	NA	NA	NA
West Virginia	NA	85,301	84,719	NA	NA	NA
Wisconsin	257,609	281,221	279,477	20,887	^R 19,236	16,508
Wyoming	NA	51,768	51,656	4,533	^R 4,607	NA
Total	14,492,666	14,767,198	14,806,988	1,324,601	^R1,419,458	^R1,415,549

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	June	May	April	March	February	January
Alabama	24,005	26,256	24,632	29,592	29,830	33,062
Alaska	10,247	10,881	11,872	13,040	12,516	14,428
Arizona	7,467	7,574	10,115	12,001	12,168	14,726
Arkansas	NA	20,481	19,046	24,796	23,129	23,745
California	120,557	140,353	150,888	151,886	190,777	203,553
Colorado	NA	18,619	24,720	31,317	32,174	36,697
Connecticut	7,280	7,933	10,871	13,255	14,383	16,558
Delaware	2,833	2,925	3,298	4,030	3,776	4,203
District of Columbia	1,348	1,720	3,025	4,064	4,747	4,951
Florida	48,225	42,720	32,801	36,986	32,925	38,634
Georgia	24,018	20,054	25,861	37,321	39,542	42,548
Hawaii	228	216	223	221	232	252
Idaho	3,876	4,186	5,684	6,585	7,284	8,295
Illinois	46,356	51,280	79,927	110,485	107,855	146,173
Indiana	31,509	32,851	NA	62,620	57,078	68,688
Iowa	11,021	13,167	20,383	30,256	25,941	33,082
Kansas	18,793	17,585	19,364	29,491	26,029	31,116
Kentucky	10,292	11,505	14,076	21,967	21,257	26,211
Louisiana	NA	111,328	101,836	110,398	97,310	111,920
Maine	305	335	470	610	629	777
Maryland	9,612	10,503	14,145	27,315	28,426	33,158
Massachusetts	NA	21,846	29,256	36,408	38,350	42,828
Michigan	43,866	51,642	77,995	106,043	106,517	119,774
Minnesota	14,579	14,749	21,649	37,306	36,306	46,151
Mississippi	^R 18,596	^R 17,372	^R 15,119	^R 18,465	17,463	^R 18,722
Missouri	12,566	13,741	21,664	33,690	34,874	40,704
Montana	3,638	2,838	4,240	5,477	5,313	7,480
Nebraska	5,849	6,946	9,830	13,612	13,802	16,322
Nevada	9,447	9,976	11,035	11,071	11,832	12,723
New Hampshire	999	1,226	1,864	2,183	2,585	2,788
New Jersey	31,639	41,616	47,096	65,242	66,099	70,507
New Mexico	^R 8,579	^R 11,181	^R 11,954	^R 14,537	^R 12,873	^R 18,386
New York	^R 71,088	NA	82,436	107,969	115,160	^R 130,336
North Carolina	15,680	14,761	17,721	23,352	25,906	28,061
North Dakota	1,374	1,770	2,804	3,853	3,944	4,673
Ohio	38,783	45,665	67,612	98,218	99,776	113,599
Oklahoma	40,753	33,071	32,204	43,151	40,846	44,699
Oregon	10,671	10,944	NA	NA	17,736	21,237
Pennsylvania	31,351	34,776	NA	72,421	75,456	75,437
Rhode Island	4,612	^R 5,733	NA	7,900	7,949	9,352
South Carolina	11,503	11,680	12,349	15,673	17,097	18,065
South Dakota	1,209	2,114	2,244	3,588	3,464	4,445
Tennessee	16,972	17,809	21,904	31,153	28,238	NA
Texas	^R 320,668	^R 294,670	^R 267,069	^R 288,086	^R 252,538	^R 289,282
Utah	6,931	7,559	12,218	14,697	16,652	17,827
Vermont	347	409	716	918	1,085	1,202
Virginia	14,963	14,715	18,956	25,191	27,386	27,819
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	9,140	12,281	9,941	13,133
Wisconsin	18,703	19,671	27,884	44,076	39,114	51,531
Wyoming	5,041	5,547	^R 5,396	NA	NA	8,805
Total	^R 1,318,988	^R 1,357,389	^R 1,546,087	^R 1,951,786	^R 1,937,886	^R 2,220,922

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	Total	December	November	October	September	August
Alabama	292,094	30,822	24,666	20,865	19,874	21,774
Alaska	149,164	15,172	12,560	13,113	8,844	10,563
Arizona	112,590	11,575	6,994	6,675	10,639	9,851
Arkansas	244,644	23,947	19,854	17,536	16,564	19,396
California	1,850,248	185,860	147,134	137,655	164,736	156,325
Colorado	263,988	34,668	23,250	12,664	10,469	11,882
Connecticut	134,557	15,769	11,812	9,002	6,681	7,525
Delaware	46,480	4,356	3,196	2,086	2,211	2,965
District of Columbia	33,824	4,795	2,768	1,452	1,245	1,226
Florida	477,601	38,205	29,083	35,159	40,597	48,113
Georgia	353,700	41,536	35,681	23,924	19,492	21,587
Hawaii	2,611	552	78	191	188	184
Idaho	61,707	7,186	5,519	4,449	3,487	3,021
Illinois	1,062,463	132,707	110,989	70,209	42,581	40,316
Indiana	546,337	64,388	54,190	37,412	27,504	26,411
Iowa	243,476	30,016	24,461	17,115	11,323	11,251
Kansas	248,563	29,528	22,869	14,839	12,763	15,259
Kentucky	202,583	26,707	21,185	14,189	9,760	9,195
Louisiana	1,360,160	112,335	102,939	113,454	117,136	123,872
Maine	6,247	735	694	488	332	296
Maryland	204,319	31,410	17,582	11,557	9,379	9,962
Massachusetts	377,911	38,594	30,037	22,843	20,155	22,316
Michigan	943,881	112,039	89,089	55,893	41,643	39,832
Minnesota	334,572	39,996	36,158	21,195	12,500	13,651
Mississippi	206,749	19,424	16,400	14,616	15,793	20,654
Missouri	276,124	35,740	25,019	12,114	9,958	10,011
Montana	54,114	7,361	5,273	3,728	2,287	2,167
Nebraska	128,031	14,339	10,024	7,229	5,472	7,103
Nevada	127,969	12,443	7,850	9,176	10,741	12,283
New Hampshire	20,822	2,445	1,788	1,237	937	901
New Jersey	617,638	73,183	53,491	35,294	28,244	34,275
New Mexico	142,353	18,573	12,587	8,917	8,133	9,587
New York	1,220,113	123,888	101,134	75,512	71,369	80,369
North Carolina	206,940	24,543	18,390	13,802	11,392	11,394
North Dakota	42,826	4,737	3,787	2,549	2,025	2,025
Ohio	878,124	107,489	83,928	55,298	36,252	34,081
Oklahoma	452,453	45,168	34,038	29,638	34,074	41,433
Oregon	159,105	19,704	14,600	12,135	12,639	12,849
Pennsylvania	652,219	79,772	62,794	40,047	28,446	27,918
Rhode Island	82,100	8,703	7,312	5,308	4,738	4,756
South Carolina	150,962	16,582	12,978	10,282	11,399	10,059
South Dakota	32,289	3,735	3,069	1,556	1,152	1,210
Tennessee	259,773	32,226	23,385	15,919	13,668	15,880
Texas	3,566,640	301,259	280,454	282,035	312,902	338,035
Utah	137,605	20,196	13,494	10,669	6,475	6,849
Vermont	8,052	988	723	529	345	293
Virginia	232,674	30,339	20,442	13,107	11,415	14,548
Washington	222,391	30,513	25,964	15,906	16,143	14,325
West Virginia	119,512	14,615	11,696	7,894	6,412	6,360
Wisconsin	396,055	47,139	41,199	26,442	16,682	15,970
Wyoming	70,797	7,494	6,457	5,066	3,926	4,369
Total	20,018,151	2,135,495	1,731,064	1,379,970	1,293,122	1,366,476

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	July	June	May	April	March	February
Alabama	22,227	20,045	22,082	23,547	25,026	29,884
Alaska	10,544	10,403	11,097	12,740	15,180	13,086
Arizona	9,309	7,229	8,782	7,625	10,311	11,087
Arkansas	21,517	17,581	16,536	18,160	20,770	24,954
California	155,009	125,567	141,632	141,973	152,681	161,518
Colorado	10,936	13,495	20,011	23,411	31,870	34,595
Connecticut	7,962	7,442	9,037	13,055	14,564	16,227
Delaware	3,502	2,849	3,351	4,779	5,664	5,937
District of Columbia	1,202	1,513	2,317	3,054	4,232	4,971
Florida	47,490	45,791	44,670	43,228	44,393	33,118
Georgia	21,684	18,692	23,684	29,529	30,471	41,548
Hawaii	199	192	189	196	206	217
Idaho	3,353	3,555	4,297	5,683	6,452	7,126
Illinois	46,565	44,784	64,825	89,183	116,802	132,342
Indiana	26,781	27,343	36,167	46,045	57,477	64,759
Iowa	11,156	11,230	14,752	19,933	25,141	28,676
Kansas	22,657	14,872	15,156	19,057	22,487	26,477
Kentucky	9,522	9,369	12,400	15,491	19,724	23,369
Louisiana	125,051	116,921	114,992	108,177	107,402	105,443
Maine	250	326	436	565	703	643
Maryland	12,289	12,027	12,557	17,099	21,207	23,122
Massachusetts	22,993	27,915	24,821	38,118	42,439	44,773
Michigan	26,571	48,092	70,858	88,367	113,055	121,766
Minnesota	14,017	14,390	19,634	28,484	39,766	43,355
Mississippi	23,023	17,045	13,616	13,472	15,318	17,971
Missouri	12,287	11,925	15,195	24,205	28,831	45,663
Montana	2,016	2,303	3,275	4,578	5,897	6,713
Nebraska	7,678	6,238	8,891	11,628	14,296	16,336
Nevada	11,610	10,009	10,945	9,659	11,952	10,089
New Hampshire	817	1,353	1,496	2,121	2,443	2,688
New Jersey	35,224	33,854	39,652	55,888	78,447	69,857
New Mexico	9,459	7,610	9,965	9,412	13,316	15,883
New York	91,166	88,040	87,576	104,095	129,322	135,768
North Carolina	12,855	13,021	14,350	16,779	19,270	25,313
North Dakota	1,694	2,231	2,876	4,001	5,200	5,777
Ohio	34,596	52,496	58,563	74,110	96,926	112,029
Oklahoma	40,951	33,513	30,552	34,243	38,138	43,685
Oregon	9,489	7,802	9,535	11,844	14,341	15,542
Pennsylvania	29,477	30,274	44,540	59,808	73,278	83,975
Rhode Island	5,074	5,715	6,911	7,507	8,622	8,649
South Carolina	10,397	10,994	11,689	12,137	13,437	15,328
South Dakota	1,397	1,471	2,004	2,899	3,603	4,505
Tennessee	14,483	14,849	15,826	21,437	24,113	34,123
Texas	337,264	293,254	269,575	257,495	295,126	277,052
Utah	6,720	5,971	6,858	11,439	13,258	16,662
Vermont	285	354	569	782	1,048	1,059
Virginia	15,383	12,414	16,528	20,044	21,350	27,486
Washington	11,639	12,401	15,918	14,772	19,893	21,333
West Virginia	5,922	6,478	8,845	13,069	9,980	13,525
Wisconsin	16,908	17,020	26,053	33,620	45,960	47,865
Wyoming	4,142	4,738	6,145	6,101	6,734	6,756
Total	1,384,742	1,304,996	1,432,229	1,634,645	1,938,123	2,080,624

^R = Revised Data.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				September	August	July	June	May
Alabama	3.25	3.85	3.38	3.43	3.82	3.97	3.86	3.56
Alaska	1.72	1.81	1.58	1.71	1.71	1.64	1.67	1.68
Arizona	2.59	3.19	2.39	2.76	2.84	2.85	2.60	2.93
Arkansas	2.88	3.17	2.55	1.88	2.38	3.23	2.31	3.00
California	2.32	2.96	2.37	1.95	2.46	2.39	2.34	2.49
Colorado	NA	2.89	2.29	NA	^R 2.26	NA	2.43	2.46
Connecticut	5.13	5.29	5.07	4.69	4.87	5.14	4.74	5.08
Delaware	2.77	3.39	3.58	3.76	2.70	2.86	4.35	1.79
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.32	3.88	3.62	2.99	3.10	3.14	2.96	3.15
Georgia	3.44	4.07	3.66	3.37	3.45	3.57	3.01	3.55
Hawaii	5.41	6.51	5.91	5.12	5.06	4.77	4.86	5.21
Idaho	1.98	2.22	2.26	2.38	2.14	2.81	^R 2.18	1.94
Illinois	2.80	3.20	3.17	2.24	2.49	3.16	2.15	3.64
Indiana	NA	2.98	2.99	NA	NA	NA	NA	2.80
Iowa	3.59	3.78	3.37	4.00	4.29	4.11	1.98	4.17
Kansas	3.10	3.33	2.88	2.83	3.03	4.31	3.66	3.17
Kentucky	3.29	3.70	3.23	3.58	2.85	3.57	3.12	3.33
Louisiana	2.34	2.94	3.03	2.01	2.05	2.45	2.19	2.36
Maine	NA	4.23	4.42	2.69	3.21	5.39	NA	NA
Maryland	NA	4.01	3.98	NA	5.86	7.62	5.94	5.58
Massachusetts	NA	3.91	3.93	NA	7.10	5.83	5.52	4.56
Michigan	2.79	2.90	2.84	2.69	2.79	2.92	2.50	2.69
Minnesota	3.05	3.42	2.91	2.78	3.06	3.31	2.88	3.24
Mississippi	NA	3.29	3.15	NA	NA	^R 3.09	^R 2.86	NA
Missouri	3.44	3.79	3.05	4.50	4.61	5.12	4.87	4.47
Montana	2.39	3.30	2.92	2.20	1.87	2.27	2.39	2.22
Nebraska	3.33	3.79	2.88	2.90	3.01	3.65	2.98	3.73
Nevada	3.24	3.50	2.82	3.79	4.43	3.75	3.37	3.25
New Hampshire	NA	4.20	4.16	3.34	NA	4.63	NA	3.36
New Jersey	NA	4.15	3.75	NA	3.75	3.86	3.57	3.00
New Mexico	2.07	2.52	1.51	1.64	1.86	1.94	1.76	2.04
New York	NA	3.16	3.32	NA	NA	^R 3.34	^R 2.88	NA
North Carolina	3.60	4.00	3.71	3.20	3.43	3.95	3.83	3.66
North Dakota	2.65	3.31	2.75	2.11	1.51	2.57	2.34	2.74
Ohio	NA	5.46	4.16	3.55	4.70	NA	4.75	5.04
Oklahoma	2.57	3.09	2.55	2.73	2.61	2.38	2.51	2.46
Oregon	NA	2.61	2.33	2.93	3.60	4.13	3.22	2.78
Pennsylvania	NA	4.07	3.66	5.18	NA	5.50	4.79	3.94
Rhode Island	NA	4.58	4.38	4.23	3.53	3.68	3.61	3.70
South Carolina	3.50	3.74	3.86	3.48	3.57	4.09	3.81	3.90
South Dakota	3.45	3.71	2.99	3.91	4.68	4.27	2.91	4.42
Tennessee	NA	3.11	3.87	2.42	2.77	3.12	3.39	3.90
Texas	2.91	3.58	3.05	2.46	2.70	2.91	2.65	2.97
Utah	3.20	2.58	2.16	3.37	3.48	2.64	2.73	2.62
Vermont	2.65	2.19	2.88	2.26	2.34	2.60	2.69	2.82
Virginia	3.83	4.20	3.74	4.52	5.14	4.51	4.32	4.37
Washington	NA	2.65	2.33	NA	NA	NA	NA	NA
West Virginia	NA	3.15	3.34	3.59	NA	NA	NA	NA
Wisconsin	3.48	3.70	3.28	4.97	^R 4.38	^R 4.36	^R 3.82	3.63
Wyoming	NA	3.06	2.45	2.46	^R 2.93	NA	2.53	NA
Total	3.15	3.53	3.21	2.75	^R3.13	^R3.36	^R2.98	3.11

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998				1997			
	April	March	February	January	Total	December	November	October
Alabama	3.20	3.03	2.93	3.18	3.65	2.60	3.97	4.17
Alaska	1.71	1.73	1.72	1.75	1.81	1.82	1.82	1.78
Arizona	2.75	2.55	2.28	2.46	3.15	2.53	3.48	3.80
Arkansas	2.96	3.13	2.85	3.09	3.23	3.19	3.44	3.61
California	2.33	2.38	2.12	2.35	2.98	2.65	3.30	3.18
Colorado	NA	NA	NA	NA	2.92	2.57	3.59	2.71
Connecticut	5.89	4.87	5.24	5.23	5.11	5.55	3.87	4.96
Delaware	2.63	2.73	3.02	2.71	3.53	2.43	5.78	5.23
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.92	3.25	3.20	3.81	3.97	3.85	4.45	4.64
Georgia	3.63	3.85	3.18	3.43	3.98	3.65	4.01	4.05
Hawaii	5.21	6.25	5.75	6.40	6.42	6.23	6.22	6.09
Idaho	1.96	1.81	1.94	1.89	2.12	1.79	2.07	2.01
Illinois	2.90	2.81	2.85	2.78	3.28	2.92	3.72	4.00
Indiana	NA	2.32	2.48	2.49	3.03	2.79	3.21	3.64
Iowa	3.33	3.42	3.33	3.80	4.06	4.45	4.85	4.98
Kansas	2.79	2.86	2.73	3.56	3.47	3.60	4.28	3.67
Kentucky	3.99	3.23	3.09	3.22	3.83	4.07	4.28	3.83
Louisiana	2.29	2.53	2.25	2.81	3.04	2.86	3.75	3.44
Maine	3.25	3.25	3.25	3.25	3.84	3.10	2.72	4.11
Maryland	4.37	3.44	3.43	2.96	4.02	3.57	4.22	4.69
Massachusetts	3.48	3.30	2.89	3.40	3.85	3.09	4.14	4.52
Michigan	2.78	2.97	2.89	2.94	2.99	3.19	3.51	3.12
Minnesota	2.95	3.00	2.90	3.27	3.67	4.06	4.52	4.26
Mississippi	NA	NA	2.99	NA	3.39	3.31	3.83	3.86
Missouri	3.72	2.97	2.99	2.96	3.75	3.13	3.92	4.66
Montana	2.29	2.50	2.41	2.71	3.16	2.51	3.15	4.47
Nebraska	3.29	2.98	2.70	4.71	4.24	5.31	6.30	5.76
Nevada	3.00	3.29	3.00	3.03	3.39	2.84	3.71	3.46
New Hampshire	3.37	3.93	3.74	3.77	4.10	3.72	4.02	3.95
New Jersey	3.54	3.53	3.38	4.37	4.19	3.77	4.49	4.84
New Mexico	2.19	2.20	2.02	2.24	2.53	2.31	2.85	2.59
New York	3.01	NA	NA	NA	3.51	3.33	4.00	3.68
North Carolina	3.91	3.49	3.47	3.65	3.97	3.72	4.09	3.95
North Dakota	2.86	2.91	2.85	2.93	3.38	3.01	4.01	3.73
Ohio	4.89	4.87	4.27	4.82	5.18	4.35	4.66	5.09
Oklahoma	2.36	2.38	2.61	2.86	3.12	3.33	3.19	3.04
Oregon	NA	NA	2.31	2.53	2.58	2.42	2.73	2.48
Pennsylvania	NA	5.26	3.64	3.68	4.09	3.84	4.20	4.60
Rhode Island	NA	3.38	3.35	3.93	4.49	4.02	4.46	4.53
South Carolina	3.66	3.34	3.05	3.37	3.81	3.72	4.13	4.15
South Dakota	4.37	2.60	3.66	3.22	3.65	3.46	3.68	3.43
Tennessee	6.62	2.42	3.84	NA	3.36	3.66	4.37	3.93
Texas	2.94	2.84	2.87	3.26	3.66	3.97	3.86	3.57
Utah	2.89	3.23	3.68	3.25	2.79	3.46	3.07	2.64
Vermont	2.74	2.92	2.66	2.59	2.33	2.64	2.77	2.34
Virginia	3.64	3.25	3.63	3.97	4.14	3.69	4.11	4.71
Washington	NA	NA	NA	NA	2.62	2.39	2.82	2.27
West Virginia	3.61	2.58	3.15	3.34	3.17	3.11	3.07	3.62
Wisconsin	3.54	3.33	2.99	3.21	3.67	3.32	3.75	3.91
Wyoming	^R 1.28	3.29	3.31	NA	3.11	2.93	3.61	3.25
Total	^R 3.21	3.22	3.08	3.28	3.61	3.42	3.91	3.86

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	September	August	July	June	May	April	March	February
Alabama	3.83	3.88	4.10	3.86	3.54	3.16	3.20	4.02
Alaska	1.79	1.73	1.74	1.70	1.78	1.81	1.84	1.80
Arizona	3.74	3.16	2.98	3.32	3.18	2.61	2.22	2.85
Arkansas	2.87	3.28	2.78	2.77	2.59	2.48	2.46	3.16
California	2.74	2.79	3.72	2.67	2.55	2.30	2.25	3.21
Colorado	2.66	2.41	2.67	2.57	2.42	2.52	2.32	3.01
Connecticut	5.29	5.33	4.55	4.76	4.81	4.94	4.82	6.00
Delaware	1.44	3.17	3.35	3.42	3.17	2.88	3.69	4.48
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.82	3.31	3.41	3.50	3.09	3.62	4.04	4.56
Georgia	5.29	3.89	3.95	4.37	3.20	3.08	3.31	4.15
Hawaii	6.11	6.35	6.59	5.46	6.47	7.21	6.50	7.73
Idaho	2.17	2.50	2.16	2.83	2.98	2.08	1.85	2.13
Illinois	3.78	3.37	2.81	3.11	3.06	2.48	2.43	3.30
Indiana	3.15	2.87	2.54	2.35	2.32	2.07	2.31	3.20
Iowa	5.39	5.86	6.62	4.75	3.50	2.83	3.05	3.66
Kansas	3.47	3.09	2.88	3.02	2.85	2.38	2.67	3.67
Kentucky	3.57	3.62	3.68	3.69	3.30	3.62	3.41	3.47
Louisiana	3.02	2.50	2.58	2.64	2.41	2.37	2.44	3.46
Maine	3.79	4.43	4.34	4.53	4.69	3.43	4.26	3.52
Maryland	5.77	6.05	5.81	4.34	4.33	3.21	3.24	3.83
Massachusetts	5.00	4.91	5.29	5.61	2.86	3.26	2.97	4.12
Michigan	2.87	2.63	2.54	2.69	2.60	2.56	2.66	3.28
Minnesota	4.02	2.97	3.92	3.49	2.64	2.41	2.70	3.48
Mississippi	3.25	2.88	2.87	2.95	2.43	2.89	2.82	3.48
Missouri	5.08	4.80	4.62	5.32	3.96	3.12	2.79	3.51
Montana	3.76	3.96	3.63	3.91	2.28	3.09	2.70	3.50
Nebraska	7.03	5.51	4.96	4.09	3.11	2.28	3.02	3.75
Nevada	4.12	3.99	3.87	3.64	2.72	2.81	2.96	3.37
New Hampshire	4.02	4.45	4.28	4.34	3.66	3.15	3.99	4.42
New Jersey	4.34	4.41	4.29	4.21	3.86	3.15	3.99	4.21
New Mexico	2.62	2.18	2.13	2.13	2.04	1.91	1.38	2.39
New York	2.92	2.79	2.59	2.87	2.64	2.69	2.85	3.65
North Carolina	4.13	3.96	3.90	3.84	3.83	3.40	3.51	4.34
North Dakota	3.53	3.36	3.14	3.17	2.95	2.50	2.43	3.59
Ohio	4.91	5.51	7.16	6.45	5.96	5.79	5.01	5.41
Oklahoma	2.58	2.66	3.23	2.66	2.22	2.22	3.09	3.68
Oregon	3.12	4.01	3.45	3.00	3.02	1.95	1.92	2.35
Pennsylvania	4.22	4.95	4.32	4.90	4.30	3.48	3.48	4.12
Rhode Island	5.71	6.64	7.53	6.42	4.81	3.46	3.16	4.26
South Carolina	4.03	3.86	3.74	3.78	3.54	3.25	2.95	3.97
South Dakota	4.03	4.26	4.40	4.58	3.75	3.02	2.78	3.95
Tennessee	2.78	2.51	2.71	2.82	2.96	2.51	2.78	3.73
Texas	3.21	3.11	3.23	3.01	2.50	2.38	3.01	4.16
Utah	2.81	3.02	2.83	2.35	1.93	2.15	2.69	2.76
Vermont	2.29	2.33	2.41	2.58	2.77	2.39	2.26	2.16
Virginia	4.69	4.47	4.27	3.77	5.12	3.28	3.49	3.96
Washington	2.44	2.41	2.53	2.28	2.53	2.70	1.89	2.62
West Virginia	3.53	3.90	1.87	3.90	3.02	2.88	2.17	3.54
Wisconsin	4.63	5.12	3.71	5.09	3.49	3.11	2.89	3.54
Wyoming	3.35	2.90	2.94	2.85	1.64	2.48	3.19	3.61
Total	3.50	3.34	3.44	3.41	3.11	2.92	3.04	3.76

^R = Revised Data.

NA = Not Available.

— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				September	August	July	June	May
Alabama	7.84	8.52	7.06	10.71	10.78	11.13	10.91	8.99
Alaska	3.68	3.82	3.44	3.01	3.75	4.71	4.02	3.83
Arizona	8.35	7.59	7.57	13.01	13.19	12.24	11.02	9.58
Arkansas	7.42	6.70	5.73	8.81	8.99	9.03	8.72	5.83
California	6.95	6.59	6.47	7.01	7.21	7.07	7.32	7.01
Colorado	NA	4.72	4.46	8.36	^R 7.44	NA	NA	5.24
Connecticut	10.50	10.37	9.96	11.73	11.80	11.62	11.11	11.57
Delaware	8.75	8.29	6.91	12.78	12.61	11.67	10.99	9.44
District of Columbia	8.86	9.19	8.95	11.22	8.59	8.87	8.50	9.70
Florida	11.50	11.66	10.54	13.56	13.59	13.79	13.30	13.08
Georgia	7.90	8.07	6.70	15.53	15.94	16.76	11.73	13.50
Hawaii	19.33	22.05	19.65	13.34	23.96	18.60	18.75	19.37
Idaho	5.34	5.09	5.23	6.55	6.71	6.26	5.86	5.59
Illinois	5.65	6.11	5.30	8.06	8.16	8.69	8.09	7.94
Indiana	NA	6.61	5.46	NA	NA	NA	9.95	8.81
Iowa	6.07	6.07	5.41	10.97	10.78	11.56	8.41	7.80
Kansas	6.13	6.47	5.52	7.97	7.94	8.04	7.61	6.60
Kentucky	6.04	6.35	5.32	9.19	9.75	7.87	8.15	7.15
Louisiana	6.52	7.13	6.54	8.91	8.84	8.85	8.36	8.95
Maine	8.11	8.59	7.76	8.88	9.13	9.11	8.33	8.66
Maryland	NA	8.40	7.55	NA	11.52	12.03	10.82	9.82
Massachusetts	NA	9.36	8.78	NA	11.36	10.45	NA	NA
Michigan	5.20	5.21	4.89	6.96	7.35	7.12	6.23	5.85
Minnesota	5.53	5.77	5.30	7.04	7.32	7.57	7.15	6.45
Mississippi	NA	6.33	5.52	NA	NA	^R 7.60	^R 7.32	^R 6.44
Missouri	6.53	6.53	5.89	9.86	10.94	9.76	8.84	7.40
Montana	NA	4.88	4.85	7.04	6.89	6.70	6.44	NA
Nebraska	5.28	5.54	4.72	6.91	7.12	6.87	6.42	5.99
Nevada	7.12	6.16	6.24	9.25	9.27	8.69	7.74	7.30
New Hampshire	NA	8.50	7.08	9.03	NA	9.15	8.20	7.07
New Jersey	NA	7.98	7.13	NA	9.93	9.63	9.32	6.80
New Mexico	5.81	6.74	4.68	10.19	10.57	10.89	31.23	9.69
New York	NA	9.66	NA	NA	^R 13.55	^R 7.01	NA	NA
North Carolina	8.54	9.23	7.38	12.56	13.29	12.05	11.81	9.29
North Dakota	5.21	4.69	4.68	7.69	9.87	7.09	7.03	5.96
Ohio	NA	6.88	5.63	9.30	9.89	NA	7.35	6.56
Oklahoma	6.06	6.32	5.57	9.50	9.33	8.91	8.37	6.84
Oregon	NA	6.21	6.35	8.78	9.04	8.33	7.48	7.19
Pennsylvania	NA	8.46	7.20	NA	NA	11.22	10.51	9.02
Rhode Island	NA	9.67	8.30	12.15	12.14	11.94	10.94	9.67
South Carolina	8.33	8.57	7.29	10.10	10.32	10.18	9.76	8.44
South Dakota	5.70	5.58	5.15	8.38	8.63	8.90	6.54	6.88
Tennessee	NA	6.96	6.29	8.51	9.03	8.68	8.15	6.95
Texas	6.34	6.38	5.83	8.79	8.97	8.86	7.94	7.31
Utah	5.68	5.06	4.43	6.13	7.01	6.70	5.39	5.72
Vermont	6.50	6.40	6.38	5.12	8.77	8.91	8.08	7.28
Virginia	8.65	8.60	7.69	12.22	12.28	12.22	11.73	10.14
Washington	NA	5.59	5.67	NA	NA	NA	NA	NA
West Virginia	NA	7.13	7.03	NA	NA	NA	NA	NA
Wisconsin	6.17	6.38	5.91	6.51	6.82	7.16	6.50	6.29
Wyoming	NA	4.18	4.43	6.74	6.58	NA	5.99	5.79
Total	6.89	6.99	6.27	8.93	^R 9.18	^R 8.62	^R 8.41	7.59

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998				1997			
	April	March	February	January	Total	December	November	October
Alabama	7.73	7.00	7.10	7.41	8.35	7.28	7.95	11.05
Alaska	3.66	3.71	3.65	3.56	3.77	3.62	3.69	3.75
Arizona	8.14	7.39	7.40	7.23	7.83	7.61	9.20	11.36
Arkansas	6.86	6.41	6.50	9.42	6.67	6.26	6.43	8.70
California	6.80	6.78	6.49	7.28	6.81	7.20	7.48	7.80
Colorado	4.74	4.49	4.57	4.50	4.81	4.73	5.18	5.96
Connecticut	9.78	10.18	10.33	10.36	10.33	10.15	10.30	10.27
Delaware	8.51	8.15	8.08	8.07	8.36	8.04	8.69	10.74
District of Columbia	8.86	8.62	8.44	9.01	9.39	8.97	11.01	11.27
Florida	11.34	10.51	10.47	10.33	11.90	11.78	13.01	13.85
Georgia	7.09	5.78	6.15	6.40	7.41	6.05	5.91	8.08
Hawaii	19.21	19.87	20.46	19.99	21.74	20.43	20.87	21.07
Idaho	5.38	5.18	5.14	5.01	5.12	4.98	5.28	5.66
Illinois	5.79	4.90	4.91	4.88	5.95	5.38	5.65	6.05
Indiana	NA	6.13	6.22	6.12	6.37	5.51	5.85	6.65
Iowa	6.36	4.79	4.97	5.49	6.17	6.02	6.41	7.69
Kansas	5.92	5.76	5.80	5.82	6.42	5.92	6.42	7.68
Kentucky	6.56	5.25	5.47	5.48	6.37	6.39	6.09	7.41
Louisiana	6.46	5.28	5.60	6.10	7.16	6.34	7.88	9.43
Maine	7.90	7.90	7.90	7.90	8.47	8.36	8.21	7.80
Maryland	8.36	7.53	7.36	7.38	8.36	7.38	8.71	9.91
Massachusetts	9.64	9.37	9.26	9.19	9.43	9.94	9.70	8.51
Michigan	5.11	4.69	4.92	4.85	5.20	4.98	5.13	5.80
Minnesota	5.60	5.18	5.11	5.07	5.76	5.09	6.04	6.67
Mississippi	^R 5.88	NA	5.39	NA	6.35	5.74	6.79	8.40
Missouri	6.14	5.58	5.86	6.30	6.61	6.46	6.70	8.86
Montana	5.15	4.97	5.03	4.87	5.05	5.31	5.39	5.81
Nebraska	5.09	4.74	4.93	5.28	5.69	6.01	6.01	7.31
Nevada	6.90	6.80	6.79	6.53	6.27	6.18	6.72	7.64
New Hampshire	6.50	8.50	8.38	8.30	8.48	8.46	8.87	7.47
New Jersey	7.71	7.39	7.23	7.41	7.93	7.62	7.77	8.53
New Mexico	6.26	4.55	5.23	3.72	5.87	3.68	4.56	8.48
New York	9.26	8.54	8.62	^R 8.75	9.73	9.34	9.93	11.38
North Carolina	7.91	7.77	7.93	8.33	8.98	8.03	8.21	11.17
North Dakota	5.12	4.79	4.68	4.52	4.99	5.67	5.81	6.50
Ohio	6.22	5.97	5.75	6.25	6.75	6.20	6.31	7.40
Oklahoma	5.56	5.43	5.73	5.56	6.23	5.44	6.06	8.77
Oregon	NA	NA	6.44	6.09	6.21	6.01	6.28	6.59
Pennsylvania	NA	8.05	8.03	9.60	8.33	7.75	7.87	8.98
Rhode Island	NA	9.03	8.86	8.83	9.61	8.97	9.74	10.64
South Carolina	7.88	8.02	8.27	8.17	8.37	7.77	7.79	9.28
South Dakota	5.88	5.31	5.07	5.01	5.75	5.94	6.16	7.07
Tennessee	6.42	5.96	6.31	NA	6.91	6.66	6.68	8.26
Texas	6.29	5.14	6.58	5.42	6.32	5.59	6.40	8.00
Utah	4.85	5.51	5.73	5.83	5.13	5.29	5.70	4.65
Vermont	6.45	6.30	6.23	6.19	6.41	6.21	6.43	7.06
Virginia	8.28	7.75	8.05	8.11	8.60	7.90	8.80	10.85
Washington	NA	NA	NA	NA	5.64	5.68	5.75	5.83
West Virginia	7.55	6.85	6.78	6.81	6.81	5.87	6.63	6.02
Wisconsin	6.02	6.28	5.98	5.96	6.43	6.28	7.13	5.98
Wyoming	5.25	5.13	5.14	NA	4.58	6.16	5.26	5.54
Total	^R 6.78	6.27	6.41	^R 6.47	6.94	6.54	6.86	7.69

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	September	August	July	June	May	April	March	February
Alabama	11.56	11.64	11.21	10.40	8.65	9.17	8.61	7.57
Alaska	3.94	4.49	4.43	4.27	3.88	3.75	3.75	3.67
Arizona	9.13	10.57	10.08	9.62	8.71	7.95	7.05	6.83
Arkansas	9.57	9.29	8.68	8.26	6.96	6.43	6.17	6.12
California	7.42	7.56	7.05	7.70	6.38	6.18	6.42	6.27
Colorado	7.16	6.95	6.91	5.94	4.91	4.71	4.38	4.31
Connecticut	11.45	11.35	11.22	10.59	10.59	9.96	9.55	10.84
Delaware	11.79	11.86	11.61	10.06	8.87	8.19	7.89	7.70
District of Columbia	11.34	8.40	8.46	8.28	9.18	8.74	8.57	9.36
Florida	14.01	14.09	13.72	13.25	12.51	12.07	11.35	10.01
Georgia	10.62	11.74	11.85	12.36	10.41	6.22	8.87	7.30
Hawaii	21.36	21.64	21.20	21.54	21.81	21.33	22.32	25.59
Idaho	6.37	6.52	6.16	5.81	5.26	5.10	4.95	4.80
Illinois	8.01	7.88	7.84	7.94	5.43	5.10	5.28	6.50
Indiana	8.81	9.44	10.22	8.89	7.26	6.73	6.31	6.09
Iowa	11.05	10.11	9.41	7.97	6.13	5.16	5.49	5.92
Kansas	8.49	8.21	7.47	7.98	6.20	6.00	5.94	6.54
Kentucky	7.82	9.10	8.52	7.44	6.57	6.74	6.23	5.93
Louisiana	8.96	8.49	8.21	8.21	7.25	5.96	6.27	6.89
Maine	9.46	9.25	9.69	8.39	7.95	9.05	8.65	8.66
Maryland	10.72	11.35	10.88	9.62	8.26	8.14	7.73	8.12
Massachusetts	10.00	10.39	9.78	8.25	7.43	9.82	9.62	9.54
Michigan	6.88	7.33	6.95	6.21	5.15	4.97	4.87	4.99
Minnesota	8.31	7.94	7.76	6.78	5.39	4.63	4.73	5.70
Mississippi	8.06	7.91	7.62	7.45	7.00	6.50	5.56	5.68
Missouri	9.63	9.42	8.81	7.58	5.91	5.35	5.73	6.53
Montana	6.70	6.95	7.42	6.07	4.98	4.71	4.67	4.47
Nebraska	7.67	7.47	7.21	6.48	4.51	4.77	4.72	5.58
Nevada	7.92	7.96	7.55	7.28	6.61	6.14	5.76	5.74
New Hampshire	8.93	9.17	9.01	7.59	6.62	6.62	9.36	9.24
New Jersey	9.91	10.12	9.80	9.55	8.45	7.18	7.56	7.68
New Mexico	11.05	11.33	11.85	41.56	6.66	8.95	4.55	5.19
New York	12.59	11.62	12.70	10.83	9.01	8.51	8.86	9.55
North Carolina	13.08	13.12	12.39	10.28	8.56	8.66	9.57	8.74
North Dakota	7.36	7.39	7.19	6.29	5.33	4.20	4.21	4.38
Ohio	8.29	8.46	8.71	7.42	6.74	6.60	6.51	6.83
Oklahoma	9.11	9.19	8.79	7.99	6.68	5.85	5.56	5.68
Oregon	7.34	7.54	7.31	7.08	6.51	6.18	6.00	5.91
Pennsylvania	10.93	11.68	11.83	10.14	8.87	8.40	8.12	8.04
Rhode Island	12.10	12.53	12.30	10.90	9.70	9.67	9.39	9.18
South Carolina	9.88	9.97	9.47	8.72	7.87	8.14	8.99	8.46
South Dakota	9.10	8.07	8.39	7.83	5.92	4.95	4.83	5.09
Tennessee	8.74	8.93	8.85	8.05	6.44	6.34	6.67	6.98
Texas	8.55	8.78	8.26	7.72	6.33	5.58	5.48	5.96
Utah	5.59	5.98	5.65	5.71	5.84	4.19	5.17	4.92
Vermont	8.41	8.78	8.51	7.35	6.52	6.23	6.08	6.04
Virginia	12.04	12.20	11.99	10.50	8.88	7.97	7.42	7.92
Washington	5.86	5.88	5.90	5.84	5.71	5.70	5.50	5.42
West Virginia	8.96	9.68	10.50	8.53	7.31	6.96	6.85	6.72
Wisconsin	6.82	6.89	6.48	6.58	5.06	6.22	5.80	6.51
Wyoming	6.29	6.59	5.91	5.32	3.27	4.80	4.07	3.96
Total	8.84	8.99	8.78	8.30	6.83	6.53	6.52	6.79

^R = Revised Data.

^{NA} = Not Available.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State,
1996-1998**
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				September	August	July	June	May
Alabama	6.51	7.06	6.11	6.92	6.96	7.25	7.24	6.18
Alaska	2.40	2.40	2.31	3.22	2.15	2.08	2.05	2.24
Arizona	5.83	5.20	5.01	5.78	6.30	6.25	6.19	6.14
Arkansas	NA	5.19	4.50	5.02	4.99	5.29	NA	5.31
California	6.34	6.26	5.98	5.83	5.88	5.50	5.91	5.68
Colorado	NA	3.92	3.76	4.44	^R 4.16	NA	4.44	4.21
Connecticut	6.86	7.21	7.38	5.44	5.53	4.66	5.88	7.03
Delaware	7.06	6.66	5.71	8.72	8.40	8.14	7.81	7.33
District of Columbia	7.32	7.95	7.19	7.35	7.14	6.98	6.97	6.99
Florida	6.64	6.73	6.46	6.27	6.22	6.55	6.70	6.83
Georgia	6.59	6.74	5.83	9.08	8.96	9.40	7.59	7.99
Hawaii	13.26	14.98	14.13	15.00	10.50	12.36	12.60	13.20
Idaho	4.58	4.48	4.58	4.94	4.88	4.90	4.83	4.77
Illinois	4.96	5.47	4.85	5.13	5.99	6.29	5.72	6.81
Indiana	NA	5.62	4.59	NA	NA	NA	NA	6.35
Iowa	4.67	5.08	4.35	6.38	6.27	7.53	4.17	5.48
Kansas	5.07	5.38	4.55	5.57	4.36	5.45	5.65	5.75
Kentucky	5.52	5.75	4.85	5.69	5.69	6.14	5.57	5.33
Louisiana	NA	6.12	5.95	5.82	5.68	5.85	NA	6.10
Maine	7.29	7.77	6.97	6.89	6.89	6.81	6.70	7.20
Maryland	NA	6.54	6.06	NA	7.49	8.19	6.65	7.82
Massachusetts	NA	7.31	6.64	NA	6.45	6.22	6.55	6.86
Michigan	4.87	4.99	4.66	5.35	5.70	5.88	5.38	5.21
Minnesota	4.45	4.80	4.46	3.93	4.44	4.66	4.46	4.63
Mississippi	NA	5.17	5.24	NA	NA	^R 4.25	^R 4.23	^R 4.67
Missouri	5.66	5.78	5.26	5.71	6.04	5.93	5.65	5.52
Montana	NA	4.77	4.64	6.23	5.86	6.06	5.47	NA
Nebraska	4.69	4.74	4.33	3.52	3.73	3.91	3.91	4.25
Nevada	5.87	4.99	4.90	6.92	6.90	6.08	5.91	5.75
New Hampshire	NA	7.69	6.49	6.40	NA	6.59	NA	5.98
New Jersey	NA	6.15	6.25	NA	2.87	3.96	3.74	3.84
New Mexico	4.25	4.25	3.36	4.49	4.71	4.88	6.66	5.15
New York	NA	6.52	NA	NA	^R 4.68	^R 5.67	^R 5.01	NA
North Carolina	6.55	7.10	6.02	6.26	6.28	6.45	6.16	6.18
North Dakota	4.34	4.09	4.07	4.73	7.28	4.72	4.86	4.54
Ohio	NA	6.34	5.13	7.19	7.81	NA	6.30	5.76
Oklahoma	5.31	5.38	4.62	5.39	5.34	5.39	5.24	4.97
Oregon	NA	4.61	4.87	5.55	5.89	5.75	5.52	5.51
Pennsylvania	NA	7.52	6.32	7.92	NA	8.03	8.25	8.23
Rhode Island	NA	8.27	7.38	9.14	9.35	8.98	8.88	^R 8.37
South Carolina	6.46	6.59	6.18	5.89	5.91	5.94	6.00	5.98
South Dakota	4.50	4.53	4.18	5.65	5.60	6.23	4.33	5.07
Tennessee	NA	6.03	5.77	5.79	6.24	5.98	5.95	5.83
Texas	4.57	4.85	4.09	4.33	4.19	4.30	4.12	4.44
Utah	4.29	3.69	3.28	4.43	4.81	4.37	3.93	3.93
Vermont	5.18	5.23	5.27	4.63	5.17	4.91	5.30	5.98
Virginia	6.03	6.46	5.77	6.06	6.21	5.76	6.14	5.44
Washington	NA	4.69	4.81	NA	NA	NA	NA	NA
West Virginia	NA	6.37	6.06	6.22	6.55	6.86	NA	7.34
Wisconsin	4.91	5.25	4.70	4.21	^R 4.37	4.82	4.44	4.16
Wyoming	NA	3.51	3.99	4.69	^R 5.84	NA	NA	4.77
Total	5.54	5.80	5.34	5.52	^R5.49	5.63	5.53	^R5.62

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998				1997			
	April	March	February	January	Total	December	November	October
Alabama	6.00	6.27	6.47	6.65	6.98	6.56	6.77	7.40
Alaska	2.31	2.39	2.45	2.49	2.44	2.55	2.53	2.52
Arizona	5.79	5.50	5.59	5.65	5.31	5.55	5.82	5.82
Arkansas	5.23	5.04	5.19	5.14	5.23	5.13	5.47	5.77
California	6.65	7.06	6.75	6.69	6.41	6.99	7.04	6.65
Colorado	4.05	4.04	4.07	4.18	4.06	4.43	4.39	4.72
Connecticut	6.86	7.42	7.28	7.73	7.23	7.48	7.59	6.36
Delaware	6.85	6.75	6.72	6.70	6.70	6.60	6.88	7.46
District of Columbia	7.09	7.46	7.34	7.65	7.37	3.15	8.77	8.07
Florida	6.71	6.69	6.72	6.83	6.85	7.22	7.32	7.04
Georgia	5.53	5.51	5.86	6.16	6.43	5.73	5.53	6.22
Hawaii	13.32	13.66	14.41	14.35	15.77	13.87	59.38	14.59
Idaho	4.76	4.46	4.40	4.41	4.49	4.35	4.68	4.75
Illinois	5.21	4.70	4.25	4.76	5.43	5.21	5.26	5.79
Indiana	NA	5.44	5.97	5.52	5.44	5.11	4.96	4.97
Iowa	5.19	3.72	4.08	4.71	5.18	5.16	5.46	5.91
Kansas	6.08	3.85	5.43	5.44	5.38	5.14	5.72	5.63
Kentucky	5.67	5.44	5.63	5.32	5.79	5.92	6.03	5.42
Louisiana	5.49	4.94	5.24	5.73	6.22	5.91	7.00	7.14
Maine	7.41	7.41	7.41	7.41	7.70	7.79	7.62	6.84
Maryland	6.82	6.15	6.18	6.14	6.52	5.61	7.12	7.19
Massachusetts	7.65	7.46	7.73	7.39	7.34	8.03	7.74	5.63
Michigan	4.92	4.58	4.76	4.77	5.00	4.87	5.03	5.49
Minnesota	4.53	4.41	4.42	4.50	4.80	4.34	5.20	5.11
Mississippi	^R 4.90	^R 4.69	4.35	^R 5.11	5.26	5.23	5.75	5.77
Missouri	5.37	5.27	5.63	6.08	5.88	6.23	6.08	6.16
Montana	5.05	4.91	4.97	4.85	4.83	5.39	3.92	5.54
Nebraska	4.42	6.13	4.44	4.66	4.88	5.35	5.41	5.27
Nevada	5.76	5.69	5.76	5.63	5.08	5.32	5.42	5.43
New Hampshire	6.06	7.64	7.57	7.60	7.63	7.77	7.81	6.14
New Jersey	4.17	3.83	4.13	4.85	5.88	4.97	5.34	4.92
New Mexico	4.42	3.91	4.35	3.66	4.01	3.25	3.52	4.14
New York	6.20	NA	NA	NA	6.49	6.80	6.58	5.62
North Carolina	6.09	6.45	6.72	7.05	7.00	6.96	6.70	6.29
North Dakota	4.16	4.17	4.13	4.03	4.35	4.94	5.14	5.15
Ohio	5.79	5.62	5.43	5.96	6.23	5.86	5.97	6.14
Oklahoma	4.57	5.27	5.56	5.53	5.34	5.23	5.17	5.38
Oregon	NA	NA	5.17	4.92	4.63	4.66	4.73	4.65
Pennsylvania	NA	7.33	7.36	7.14	7.35	6.89	6.83	7.25
Rhode Island	NA	7.88	7.78	7.75	8.21	7.98	8.02	8.00
South Carolina	6.40	6.55	6.91	6.92	6.74	7.31	7.22	6.52
South Dakota	4.69	4.37	4.10	4.12	4.71	5.06	5.22	5.50
Tennessee	5.68	5.55	6.37	NA	6.11	6.36	6.27	6.33
Texas	4.75	4.32	5.37	4.66	4.91	4.99	5.27	4.96
Utah	3.76	4.36	4.35	4.54	3.92	4.39	4.65	3.78
Vermont	5.14	5.10	5.23	5.21	5.18	5.15	4.99	4.91
Virginia	5.63	5.82	6.33	6.41	6.45	6.37	6.42	6.55
Washington	NA	NA	NA	NA	4.73	4.78	4.81	4.87
West Virginia	6.60	6.32	6.31	6.28	6.34	6.18	6.24	6.76
Wisconsin	4.75	5.24	4.96	5.12	5.35	5.46	5.98	4.83
Wyoming	^R 4.62	4.55	4.56	NA	3.93	5.52	4.62	5.08
Total	^R 5.58	5.38	5.56	5.59	5.79	5.70	5.85	5.73

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	September	August	July	June	May	April	March	February
Alabama	7.53	7.44	7.54	7.16	6.79	7.05	7.20	6.86
Alaska	2.28	2.09	2.24	2.15	2.23	2.37	2.53	2.52
Arizona	5.81	5.33	5.21	5.20	5.18	5.08	5.26	5.10
Arkansas	5.56	5.19	5.33	5.39	5.15	4.91	4.87	5.08
California	5.84	4.96	5.86	6.27	5.29	6.05	6.66	6.93
Colorado	4.01	4.70	4.45	4.23	4.08	3.98	3.97	3.83
Connecticut	6.48	5.14	5.54	5.67	6.69	7.12	7.54	8.31
Delaware	7.15	8.54	7.81	7.30	6.74	6.53	6.39	6.46
District of Columbia	8.10	7.19	6.91	7.02	6.86	10.04	7.60	7.96
Florida	6.85	6.54	6.89	6.84	6.80	6.66	6.87	6.76
Georgia	6.49	7.02	7.63	7.71	6.33	5.60	7.57	6.69
Hawaii	14.46	14.93	14.91	15.21	15.09	15.18	15.55	14.91
Idaho	4.75	4.85	4.78	4.80	4.68	4.64	4.37	4.30
Illinois	6.22	6.08	5.66	5.53	4.91	4.62	4.95	5.66
Indiana	6.10	6.12	6.55	6.33	6.20	6.02	5.41	5.47
Iowa	7.37	6.39	5.64	5.99	4.83	4.30	4.76	5.27
Kansas	5.42	4.65	4.71	4.65	4.98	4.89	5.16	5.91
Kentucky	5.90	5.95	6.20	6.00	5.53	5.85	5.72	5.80
Louisiana	6.03	5.66	5.31	6.00	5.84	5.01	5.84	6.59
Maine	7.61	7.16	7.12	6.94	6.67	8.28	8.10	8.12
Maryland	6.90	6.32	6.09	6.53	6.06	6.11	5.92	7.07
Massachusetts	5.45	5.65	5.34	5.04	5.44	7.94	8.14	8.28
Michigan	6.07	6.06	5.90	5.53	4.90	4.70	4.79	4.88
Minnesota	5.20	4.59	4.63	4.64	4.02	3.86	4.11	5.15
Mississippi	4.93	4.90	4.54	4.93	5.23	5.08	4.75	5.33
Missouri	5.74	5.22	5.13	4.89	4.43	4.60	5.12	6.52
Montana	4.52	5.89	5.78	5.54	4.95	4.65	4.70	4.58
Nebraska	4.34	3.77	3.57	5.90	5.01	3.92	4.24	5.25
Nevada	5.18	5.18	5.07	5.03	5.08	5.14	4.91	4.82
New Hampshire	6.25	6.45	6.47	6.19	5.85	6.50	8.65	8.79
New Jersey	4.30	4.54	4.35	4.41	5.81	5.09	7.04	7.14
New Mexico	4.51	4.67	4.73	6.54	3.79	4.13	3.20	3.96
New York	5.09	4.86	4.40	5.32	5.95	6.15	6.78	7.61
North Carolina	6.46	6.44	6.44	5.99	6.10	6.50	7.85	7.67
North Dakota	5.11	4.58	5.11	4.76	4.38	3.69	3.65	4.07
Ohio	6.45	6.73	6.67	6.91	6.00	6.10	5.95	6.65
Oklahoma	4.87	4.80	4.79	5.00	4.83	4.67	5.11	5.58
Oregon	4.80	4.87	4.75	4.78	4.61	4.60	4.56	4.54
Pennsylvania	7.68	8.04	8.05	8.12	7.98	7.69	7.36	7.54
Rhode Island	8.77	9.12	8.96	8.77	8.07	8.46	8.17	8.20
South Carolina	3.49	6.45	6.31	6.33	6.33	7.05	7.70	7.35
South Dakota	6.51	5.22	5.44	6.09	4.77	4.04	3.96	4.28
Tennessee	6.05	5.99	6.09	6.00	5.38	5.07	5.85	6.29
Texas	4.72	4.54	4.41	4.68	4.48	4.18	4.31	5.15
Utah	3.99	4.02	3.82	3.60	3.37	3.09	3.81	3.75
Vermont	5.01	5.43	5.42	5.41	5.58	5.10	5.15	5.21
Virginia	6.58	6.56	6.66	6.08	6.29	6.27	5.91	6.59
Washington	4.90	5.29	4.93	4.63	4.80	4.19	4.68	4.69
West Virginia	7.54	8.13	8.42	7.68	6.72	6.34	6.14	6.05
Wisconsin	4.80	4.66	4.26	4.69	3.79	5.02	4.98	5.54
Wyoming	4.55	4.43	4.11	3.93	2.65	3.59	3.46	3.53
Total	5.57	5.43	5.35	5.64	5.39	5.46	5.72	6.13

^R = Revised Data.

NA = Not Available.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				September	August	July	June	May
Alabama	3.23	3.58	3.58	2.95	3.06	3.15	3.11	3.16
Alaska	NA	1.54	1.44	NA	NA	1.22	1.40	1.43
Arizona	3.42	3.67	3.80	3.22	3.20	3.36	3.51	3.44
Arkansas	3.44	3.58	3.13	3.04	3.09	3.47	3.28	3.28
California	3.72	4.00	3.67	3.46	3.28	3.48	3.38	2.88
Colorado	NA	3.43	0.52	1.90	NA	NA	NA	2.48
Connecticut	4.35	4.70	4.75	3.46	3.63	3.61	3.69	4.13
Delaware	4.27	4.28	4.20	4.39	5.12	4.32	4.35	4.32
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.32	4.30	4.19	4.05	4.02	4.37	4.20	4.46
Georgia	5.13	4.59	4.43	4.51	5.06	3.85	4.90	5.30
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	3.09	2.77	2.87	2.94	3.32	2.97	3.10	3.09
Illinois	4.07	3.88	4.12	3.71	4.38	3.10	4.49	4.18
Indiana	NA	4.49	3.56	NA	NA	NA	4.53	4.51
Iowa	1.80	3.88	3.53	3.31	3.65	4.14	3.18	3.39
Kansas	2.88	3.18	2.93	2.06	2.45	2.44	3.11	3.31
Kentucky	3.87	4.05	3.79	3.66	3.71	3.61	3.48	3.21
Louisiana	2.37	2.77	2.73	1.85	1.98	2.30	2.43	2.62
Maine	4.99	5.42	5.05	3.92	3.80	4.17	4.10	4.70
Maryland	NA	3.24	5.42	NA	4.69	6.15	NA	5.02
Massachusetts	NA	5.74	5.31	NA	4.36	4.83	4.89	4.66
Michigan	4.02	4.00	3.84	4.67	5.21	4.77	4.32	4.01
Minnesota	2.80	3.14	2.88	2.18	2.51	2.84	2.09	3.03
Mississippi	NA	3.43	3.35	3.24	NA	NA	NA	NA
Missouri	4.48	4.62	4.23	4.13	4.27	3.73	4.27	4.25
Montana	5.04	4.77	4.86	11.14	7.57	6.88	3.72	5.89
Nebraska	3.21	3.70	3.13	2.56	2.72	3.20	3.34	3.34
Nevada	5.10	7.31	4.95	4.35	4.46	5.86	5.81	5.94
New Hampshire	NA	4.68	4.18	3.67	NA	3.58	3.38	3.90
New Jersey	NA	3.71	3.81	NA	2.88	3.17	3.39	3.43
New Mexico	3.32	3.10	3.12	2.99	3.19	3.13	3.45	3.77
New York	NA	4.97	5.09	NA	NA	NA	^b 3.92	NA
North Carolina	3.97	4.67	4.21	3.55	3.62	3.60	3.57	3.68
North Dakota	2.92	2.93	3.18	2.11	2.53	2.85	2.60	3.15
Ohio	NA	4.99	4.16	5.78	7.46	NA	5.05	4.98
Oklahoma	3.76	4.11	3.16	3.40	3.44	3.41	3.43	3.13
Oregon	NA	3.00	3.20	3.57	3.80	NA	3.77	3.75
Pennsylvania	4.32	4.66	4.16	4.04	3.88	3.94	4.09	4.05
Rhode Island	NA	2.12	4.34	3.08	2.98	3.59	3.58	NA
South Carolina	3.26	3.59	3.70	2.93	2.47	3.37	3.21	3.31
South Dakota	3.33	3.96	2.97	3.38	3.17	3.21	3.54	3.44
Tennessee	NA	4.02	3.89	3.34	3.38	4.37	3.50	3.54
Texas	2.36	2.66	2.45	1.87	2.15	2.53	2.24	2.44
Utah	3.05	2.42	2.08	3.08	3.36	3.20	2.78	2.90
Vermont	2.88	3.07	3.51	2.74	2.77	2.78	2.78	2.87
Virginia	3.86	4.66	4.18	3.16	3.33	3.61	3.44	3.01
Washington	NA	3.17	2.53	NA	NA	NA	NA	NA
West Virginia	NA	2.91	2.71	NA	NA	NA	NA	NA
Wisconsin	3.89	3.96	3.31	3.02	3.49	3.76	3.44	3.69
Wyoming	NA	3.46	3.12	3.80	NA	NA	3.82	4.19
Total	3.17	3.47	3.31	2.64	2.73	2.99	2.95	3.10

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998				1997			
	April	March	February	January	Total	December	November	October
Alabama	3.44	3.03	3.50	3.47	3.65	3.79	3.81	3.85
Alaska	1.42	1.45	1.52	1.56	1.54	1.56	1.55	1.54
Arizona	3.45	3.33	3.76	3.53	3.60	3.40	3.23	3.71
Arkansas	3.39	3.78	3.62	3.77	3.71	4.01	4.31	3.90
California	3.97	3.31	5.34	4.55	4.18	4.51	4.58	4.36
Colorado	2.26	2.62	2.58	2.69	3.66	3.79	4.91	4.07
Connecticut	4.55	4.74	5.13	5.12	4.73	5.10	4.94	4.33
Delaware	4.63	3.79	4.08	4.22	4.40	4.72	4.87	4.63
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.58	4.40	4.29	4.59	4.41	4.70	4.96	4.78
Georgia	5.15	5.18	5.37	5.63	4.56	4.22	4.63	4.52
Hawaii	—	—	—	—	10.79	—	—	—
Idaho ^a	3.10	3.25	3.02	3.06	2.76	2.77	2.74	2.72
Illinois	4.02	4.08	4.12	4.22	3.97	4.17	4.80	3.77
Indiana	NA	4.56	4.29	4.68	4.33	4.73	3.67	3.59
Iowa	0.73	0.64	2.42	3.43	4.11	4.55	4.53	4.41
Kansas	3.56	3.61	3.67	3.91	3.32	3.61	3.81	3.96
Kentucky	3.85	3.79	4.51	4.59	4.19	4.85	4.91	3.97
Louisiana	2.19	2.89	2.22	2.90	2.87	2.91	3.42	3.27
Maine	6.02	6.02	6.02	6.02	5.55	7.19	5.88	4.68
Maryland	5.10	4.68	4.82	5.42	3.25	3.76	3.64	2.99
Massachusetts	6.64	6.77	6.70	6.79	5.78	6.72	6.34	4.34
Michigan	3.81	3.61	4.11	3.90	4.02	4.02	4.07	4.33
Minnesota	3.06	3.08	3.00	3.25	3.28	3.24	3.87	3.83
Mississippi	NA	NA	3.22	NA	3.55	3.60	4.12	3.93
Missouri	4.30	4.27	4.69	5.30	4.78	5.48	4.23	4.51
Montana	5.22	5.02	4.85	4.82	4.79	4.85	4.80	4.91
Nebraska	3.35	3.34	3.27	3.30	3.85	4.08	4.44	4.28
Nevada	5.84	6.00	6.06	5.90	7.77	7.98	9.55	11.41
New Hampshire	3.77	5.47	5.84	7.08	4.90	7.36	6.48	4.50
New Jersey	3.42	3.24	3.42	3.71	3.78	3.99	4.24	3.79
New Mexico	4.00	4.09	^R 5.69	^R 2.18	2.99	2.14	2.81	3.57
New York	4.49	15.18	NA	NA	5.05	5.56	5.29	4.69
North Carolina	3.63	4.19	4.41	4.95	4.66	5.03	4.98	4.07
North Dakota	3.10	3.22	3.01	3.22	3.05	3.24	3.64	3.84
Ohio	5.21	5.67	5.06	5.62	4.93	4.84	4.79	4.31
Oklahoma	3.32	4.12	4.18	4.10	4.18	4.39	4.50	4.22
Oregon	NA	NA	3.73	3.67	3.03	3.32	3.10	2.86
Pennsylvania	4.40	4.57	4.55	4.80	4.61	4.62	4.32	4.36
Rhode Island	3.86	4.06	4.25	4.59	4.33	3.77	2.92	2.49
South Carolina	3.42	3.53	3.38	3.67	3.72	4.00	4.31	4.02
South Dakota	3.37	3.38	3.25	3.30	4.02	3.72	4.37	4.65
Tennessee	3.64	3.59	3.98	NA	4.18	4.81	4.72	4.47
Texas	2.49	2.49	2.44	2.66	2.82	2.76	3.54	3.33
Utah	2.95	3.05	3.19	3.06	2.55	3.02	2.90	2.73
Vermont	2.86	2.94	3.01	3.06	3.07	3.11	3.12	2.97
Virginia	3.45	4.08	4.99	4.81	4.68	5.20	4.73	3.92
Washington	NA	NA	NA	NA	3.16	3.08	3.38	2.86
West Virginia	2.97	2.79	2.75	2.81	2.91	2.87	2.88	2.97
Wisconsin	4.20	4.17	4.48	3.79	4.13	4.53	5.05	4.23
Wyoming	4.12	NA	NA	3.29	3.49	3.65	3.66	3.42
Total	3.22	3.41	3.52	3.68	3.59	3.79	4.07	3.69

See footnotes at end of table.

**Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State,
1996-1998**

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	September	August	July	June	May	April	March	February
Alabama	3.38	3.38	3.24	3.37	3.35	3.14	3.34	4.11
Alaska	1.57	1.56	1.56	1.48	1.44	1.53	1.55	1.57
Arizona	3.29	3.13	3.19	3.94	3.94	4.35	4.10	3.77
Arkansas	3.61	3.40	3.35	3.40	3.20	3.22	3.34	3.81
California	3.54	3.43	3.81	4.05	2.57	3.51	4.32	5.27
Colorado	3.31	3.15	3.02	2.99	3.18	2.99	3.16	4.30
Connecticut	4.06	3.85	3.92	4.01	4.21	4.44	4.89	5.74
Delaware	4.13	4.14	4.11	4.06	3.69	3.65	4.43	5.12
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.56	4.41	4.11	4.19	4.13	4.20	4.20	4.45
Georgia	5.57	4.04	4.16	5.30	4.03	3.79	4.38	4.86
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	2.69	2.68	3.28	2.52	2.73	2.75	2.75	2.76
Illinois	3.23	3.78	3.50	2.67	2.53	3.46	4.05	4.95
Indiana	4.29	4.16	4.12	4.62	4.74	4.92	4.65	4.44
Iowa	3.89	3.51	4.10	3.36	3.95	3.13	4.03	4.72
Kansas	3.14	2.84	2.75	2.77	3.18	2.49	2.62	3.66
Kentucky	3.81	3.75	3.78	3.67	3.61	3.70	3.85	4.53
Louisiana	2.78	2.43	2.69	2.65	2.34	2.27	2.04	3.31
Maine	4.65	4.43	4.40	4.45	4.10	5.77	7.08	7.10
Maryland	3.33	3.07	3.68	3.20	3.22	13.80	3.88	1.12
Massachusetts	4.03	3.85	4.00	3.57	5.01	6.08	6.81	8.00
Michigan	3.99	4.35	4.41	4.23	4.07	3.95	3.98	3.86
Minnesota	3.10	2.77	2.78	2.75	2.72	2.60	2.74	3.74
Mississippi	3.43	3.23	3.15	3.27	3.12	3.04	2.98	3.87
Missouri	4.03	4.03	3.97	3.95	3.56	3.84	4.58	6.06
Montana	4.90	4.90	4.88	4.80	4.77	4.76	4.76	4.72
Nebraska	3.59	3.48	3.19	3.11	2.86	2.74	3.29	4.26
Nevada	9.10	7.31	6.98	7.39	7.66	5.72	4.60	8.22
New Hampshire	3.61	3.43	3.39	3.59	3.56	3.99	6.05	7.90
New Jersey	3.43	2.11	3.06	3.27	3.30	2.88	4.51	5.01
New Mexico	3.10	2.91	2.86	3.87	2.93	7.28	3.64	4.09
New York	3.47	3.69	3.82	3.93	4.27	4.66	5.42	6.12
North Carolina	4.24	4.16	3.95	3.59	3.96	4.08	4.73	5.33
North Dakota	3.16	3.46	2.97	2.85	2.29	2.24	1.51	4.67
Ohio	4.80	4.65	3.82	5.79	3.89	5.15	4.75	5.80
Oklahoma	3.59	3.46	3.44	3.41	2.83	3.17	4.02	4.67
Oregon	2.78	2.69	2.89	2.88	2.95	3.03	3.12	3.22
Pennsylvania	4.13	4.04	4.47	4.58	4.36	4.61	4.78	5.11
Rhode Island	3.08	2.19	2.13	1.64	1.94	1.09	1.62	3.44
South Carolina	3.27	3.29	3.44	3.36	3.30	3.25	3.47	4.27
South Dakota	4.17	3.97	4.50	4.09	3.55	3.12	3.00	4.01
Tennessee	3.95	3.51	3.18	3.77	3.50	3.53	4.22	4.88
Texas	2.69	2.32	2.42	2.49	2.33	2.05	2.10	3.21
Utah	2.54	2.73	2.63	2.21	2.21	2.25	2.46	2.46
Vermont	3.00	2.96	2.97	3.01	3.05	2.98	3.10	3.14
Virginia	4.32	4.32	4.53	4.18	4.47	2.15	4.91	6.99
Washington	2.69	2.71	2.87	2.90	3.03	2.83	2.97	3.69
West Virginia	2.93	2.82	2.91	2.72	2.81	2.49	2.82	3.03
Wisconsin	3.62	3.34	3.32	3.39	3.00	3.92	3.54	4.37
Wyoming	3.42	3.44	3.48	3.45	3.34	3.51	3.51	3.52
Total	3.25	2.90	3.06	3.10	2.96	3.02	3.35	4.20

^R = Revised Data.

NA = Not Available.

— = Not Applicable.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers,
by State, 1996-1998**

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				August	July	June	May	April
Alabama	2.56	2.59	2.84	2.50	2.63	2.49	2.62	2.69
Alaska	1.84	1.69	1.35	1.76	1.80	1.87	1.84	1.84
Arizona	2.49	2.84	2.95	2.28	2.41	2.79	3.20	2.82
Arkansas	2.31	2.47	2.54	2.05	2.49	2.33	2.33	2.56
California	2.84	2.97	2.59	2.83	2.92	2.70	2.94	2.71
Colorado	2.85	3.48	1.88	3.31	2.77	2.83	2.56	2.53
Connecticut	2.47	2.42	2.81	2.34	2.46	2.38	2.56	2.70
Delaware	2.90	3.04	3.44	2.66	3.47	3.27	1.34	1.41
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.35	2.37	3.16	2.18	2.27	2.31	2.31	2.68
Georgia	2.99	2.60	3.01	2.82	3.18	2.91	3.72	1.94
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.28	2.35	2.64	1.95	2.27	2.37	2.37	2.55
Indiana	2.86	3.03	3.33	2.58	2.80	2.95	2.98	3.37
Iowa	3.00	3.14	3.21	2.80	3.01	2.86	3.16	3.14
Kansas	2.18	2.18	2.24	1.99	2.28	2.14	2.20	2.40
Kentucky	3.28	3.14	3.45	2.43	2.86	3.68	3.59	5.25
Louisiana	2.46	2.63	2.99	2.17	2.59	2.40	2.52	2.66
Maine	—	—	—	—	—	—	—	—
Maryland	2.81	2.80	3.12	2.49	2.84	2.93	2.96	3.33
Massachusetts	2.90	2.91	3.30	2.35	2.62	2.24	2.86	3.66
Michigan	1.13	0.68	0.81	1.38	1.34	1.29	1.20	1.35
Minnesota	2.52	2.36	2.22	2.41	2.48	2.42	2.74	2.76
Mississippi	2.38	2.58	3.07	2.16	2.47	2.36	2.41	2.56
Missouri	2.25	2.51	2.55	1.95	2.39	2.41	2.31	2.56
Montana	5.00	3.42	6.57	4.99	2.47	2.59	5.34	1.40
Nebraska	2.48	2.30	1.96	2.49	2.62	2.37	2.40	1.98
Nevada	2.40	2.04	2.03	2.42	2.34	2.73	2.44	2.31
New Hampshire	—	2.69	—	—	—	—	—	—
New Jersey	2.76	2.88	3.06	2.46	2.92	2.73	2.77	3.05
New Mexico	2.28	2.52	2.12	2.03	2.32	2.20	2.33	2.41
New York	2.63	2.71	3.05	2.29	2.63	2.51	2.64	2.87
North Carolina	2.76	3.05	3.12	2.55	2.92	2.78	2.89	3.37
North Dakota	—	3.81	3.06	—	—	—	—	—
Ohio	3.31	3.48	3.19	3.93	2.98	2.79	3.06	4.01
Oklahoma	2.55	2.76	2.94	2.07	2.52	2.41	2.52	2.88
Oregon	1.37	1.51	1.24	1.56	1.46	1.31	1.50	1.36
Pennsylvania	3.12	2.74	3.13	2.63	3.18	2.32	5.37	5.94
Rhode Island	3.38	3.16	2.29	3.40	3.38	3.40	3.43	3.45
South Carolina	3.65	4.12	4.12	3.53	3.58	3.92	3.41	3.44
South Dakota	—	—	2.36	—	—	—	—	—
Tennessee	—	—	1.20	—	—	—	—	—
Texas	2.37	2.54	2.48	2.11	2.46	2.34	2.38	2.52
Utah	2.08	1.86	3.07	2.04	2.15	1.94	—	—
Vermont	2.93	3.02	3.16	2.67	3.09	2.81	3.03	3.08
Virginia	3.02	2.77	2.98	2.60	3.02	2.93	2.99	4.46
Washington	2.79	NA	5.15	—	—	—	—	5.59
West Virginia	4.41	4.02	3.53	3.85	6.31	2.62	3.58	—
Wisconsin	2.75	2.96	2.89	2.49	2.80	2.64	2.95	3.13
Wyoming	8.67	13.55	11.28	67.70	8.23	7.66	11.70	4.77
Total	2.44	2.59	2.67	2.21	2.50	2.40	2.46	2.59

See footnotes at end of table.

**Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers,
by State, 1996-1998**

(Dollars per Thousand Cubic Feet) — Continued

State	1998			1997				
	March	February	January	Total	December	November	October	September
Alabama	2.55	2.44	2.86	2.86	2.90	3.70	3.75	2.88
Alaska	1.85	1.88	1.85	1.74	1.84	1.84	1.85	1.88
Arizona	3.07	2.56	2.84	2.99	2.86	4.00	3.11	3.37
Arkansas	2.36	2.16	2.25	2.69	2.24	3.12	3.12	2.89
California	2.85	2.79	2.94	3.08	2.96	3.64	3.40	3.14
Colorado	2.61	2.65	3.01	3.16	2.93	3.90	2.37	2.42
Connecticut	2.79	2.63	2.74	2.47	2.74	3.38	2.76	2.37
Delaware	4.15	3.21	5.34	3.15	4.28	2.58	5.69	3.40
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.64	2.49	2.25	2.51	2.52	3.29	3.21	3.03
Georgia	1.72	2.88	2.35	2.72	4.97	3.33	3.94	3.07
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.34	2.28	2.25	2.55	2.48	3.31	3.13	2.82
Indiana	3.25	2.64	3.84	3.23	3.67	4.03	5.25	3.67
Iowa	3.35	3.00	3.36	3.41	2.99	4.16	3.81	3.28
Kansas	2.36	1.97	3.35	2.53	3.33	3.02	3.06	2.70
Kentucky	4.04	3.58	3.46	3.45	3.47	4.24	4.00	3.25
Louisiana	2.51	2.47	2.61	2.79	2.86	3.61	3.40	3.03
Maine	—	—	—	—	—	—	—	—
Maryland	3.18	3.32	3.75	2.97	3.61	4.10	3.91	3.42
Massachusetts	3.64	2.95	3.16	3.11	3.57	4.08	4.10	3.21
Michigan	0.75	0.84	0.51	0.79	0.47	1.08	1.58	0.73
Minnesota	2.83	2.62	2.63	2.44	2.99	3.72	3.67	3.56
Mississippi	2.46	2.46	2.48	2.72	2.80	3.51	3.35	3.02
Missouri	2.52	2.82	2.63	2.81	2.77	3.52	3.35	2.94
Montana	12.33	8.49	4.61	NA	4.18	6.84	2.98	64.31
Nebraska	2.72	4.47	2.72	2.86	4.94	4.29	3.21	2.98
Nevada	2.02	2.37	2.41	2.18	2.16	2.80	2.64	2.39
New Hampshire	—	—	—	2.71	—	—	—	2.85
New Jersey	2.88	2.83	2.98	3.06	3.20	4.19	4.23	3.42
New Mexico	2.39	2.30	2.43	2.64	2.55	3.02	3.05	2.82
New York	2.96	2.95	3.00	2.88	3.38	3.83	3.37	2.89
North Carolina	4.03	—	3.02	3.22	3.60	4.95	3.68	3.38
North Dakota	—	—	—	3.43	—	—	—	—
Ohio	4.14	3.16	3.32	3.72	4.13	4.12	4.00	4.35
Oklahoma	2.62	2.72	4.47	2.97	2.89	4.05	3.46	3.20
Oregon	1.23	1.03	1.14	1.49	1.48	1.44	1.45	1.49
Pennsylvania	2.69	2.64	2.79	3.02	3.16	3.69	3.65	2.99
Rhode Island	3.19	3.24	3.48	3.35	3.78	4.05	4.02	3.32
South Carolina	3.58	3.53	4.05	4.07	4.46	4.00	4.10	4.54
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.43	2.41	2.49	2.69	2.74	3.33	3.15	2.85
Utah	—	—	—	2.09	—	—	2.00	2.66
Vermont	2.81	2.77	3.02	3.16	3.42	4.21	3.96	3.23
Virginia	3.34	3.78	3.05	2.93	2.54	4.09	4.73	3.77
Washington	3.86	4.11	1.64	NA	5.73	5.16	4.21	8.62
West Virginia	—	—	5.59	3.35	3.31	3.00	3.29	3.41
Wisconsin	2.75	2.91	2.90	3.17	2.92	4.11	3.94	3.09
Wyoming	10.42	8.72	5.39	NA	1.63	3.43	4.88	7.74
Total	2.54	2.51	2.64	2.74	2.77	3.41	3.24	2.96

See footnotes at end of table.

**Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers,
by State, 1996-1998**
(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	August	July	June	May	April	March	February	January
Alabama	2.56	2.51	2.65	2.44	3.21	2.12	2.04	4.37
Alaska	1.69	1.87	1.79	1.64	1.63	1.55	1.69	1.68
Arizona	2.63	2.20	3.03	3.11	4.47	2.85	4.01	5.70
Arkansas	2.64	2.38	2.40	1.92	1.98	1.60	1.92	4.18
California	2.77	2.68	2.77	2.60	2.66	3.04	4.14	4.80
Colorado	2.77	4.07	2.31	6.20	2.47	2.26	3.32	3.76
Connecticut	2.35	2.33	2.26	2.22	2.22	2.45	3.08	3.97
Delaware	3.00	2.83	1.95	3.68	2.53	2.61	2.90	4.87
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.50	2.30	2.33	2.09	2.26	2.05	2.13	4.60
Georgia	2.27	2.75	3.13	2.64	2.64	3.34	8.15	2.08
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.39	2.31	2.37	2.29	2.12	2.00	2.97	3.41
Indiana	3.39	2.77	2.99	3.06	2.88	2.74	3.74	5.04
Iowa	3.12	2.70	3.28	2.89	2.79	2.73	3.74	5.11
Kansas	2.13	2.06	2.11	2.14	2.00	1.80	2.92	4.56
Kentucky	2.92	2.87	2.96	2.83	3.13	3.20	3.69	4.85
Louisiana	2.60	2.44	2.65	2.45	2.18	2.10	2.93	4.35
Maine	—	—	—	—	—	—	—	—
Maryland	2.89	2.35	2.69	2.98	3.14	4.18	5.75	5.04
Massachusetts	2.87	2.81	2.92	2.84	2.54	2.64	3.29	5.37
Michigan	0.58	0.96	0.89	0.42	0.61	0.69	0.59	0.56
Minnesota	2.43	2.43	2.34	2.30	2.34	2.17	3.35	2.26
Mississippi	2.61	2.46	2.52	2.37	2.27	2.08	2.61	4.15
Missouri	2.51	2.39	2.44	2.74	2.77	2.26	4.62	5.41
Montana	1.92	1.37	9.35	13.57	2.87	4.08	9.68	3.54
Nebraska	2.49	2.32	2.00	1.89	1.89	2.29	3.20	3.22
Nevada	2.02	1.98	2.09	1.99	2.02	2.05	2.33	2.14
New Hampshire	2.55	2.74	2.72	2.68	—	—	—	—
New Jersey	2.87	2.80	2.85	2.76	2.69	2.57	3.60	4.65
New Mexico	2.47	2.46	2.38	2.39	2.07	2.01	2.85	4.07
New York	2.60	2.58	2.65	2.62	2.53	2.56	3.35	4.36
North Carolina	3.09	3.12	2.87	2.64	2.79	—	—	6.89
North Dakota	—	4.00	—	4.14	3.98	2.93	—	—
Ohio	4.28	3.10	3.20	4.13	4.06	4.03	4.16	4.38
Oklahoma	2.49	2.37	2.63	2.91	2.57	2.57	4.36	4.21
Oregon	1.49	1.35	1.57	—	—	1.40	—	1.96
Pennsylvania	2.81	2.54	3.04	2.57	2.31	2.22	2.91	4.65
Rhode Island	3.04	2.98	3.21	3.09	2.82	2.90	4.09	3.18
South Carolina	4.54	4.35	3.51	3.84	3.87	2.84	4.22	6.95
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.50	2.39	2.46	2.34	2.14	2.12	2.84	3.89
Utah	1.79	1.86	4.82	—	—	—	—	—
Vermont	2.90	2.95	3.06	2.83	2.27	2.61	3.60	5.05
Virginia	2.95	2.58	2.93	3.05	2.71	2.76	1.80	3.13
Washington	0.67	4.83	3.83	7.21	5.93	NA	4.50	5.08
West Virginia	3.71	3.79	3.23	3.22	3.63	3.82	7.68	3.15
Wisconsin	2.85	3.12	2.81	2.58	2.46	2.33	3.42	4.74
Wyoming	34.13	20.44	4.00	11.82	24.02	22.85	2.47	13.99
Total	2.53	2.44	2.52	2.41	2.30	2.29	2.97	4.06

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

NA = Not Available.

— = Not Applicable.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998

State	YTD 1998		YTD 1997		YTD 1996		1998	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	September	
							Commercial	Industrial
Alabama	70.1	15.5	62.8	24.0	82.5	22.9	69.1	14.2
Alaska	57.5	NA	55.2	97.1	65.6	62.9	54.9	NA
Arizona	85.4	32.8	84.8	22.8	85.6	20.2	83.4	33.3
Arkansas	NA	9.2	94.5	10.5	95.3	12.8	44.2	10.4
California	45.6	10.6	51.1	9.4	55.2	10.4	28.4	9.3
Colorado	NA	NA	93.4	23.0	93.3	22.0	85.8	—
Connecticut	69.6	56.1	85.3	67.2	87.6	88.3	55.3	59.6
Delaware	100.0	21.8	100.0	31.9	100.0	39.4	100.0	17.5
District of Columbia	52.3	—	54.9	—	74.5	—	36.5	—
Florida	96.4	4.2	97.8	10.5	97.2	13.3	96.5	3.9
Georgia	83.7	13.4	89.1	25.6	94.7	33.3	71.1	14.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	87.3	2.5	87.0	2.0	87.3	1.4	80.3	2.5
Illinois	48.4	8.1	55.3	12.0	54.0	12.8	43.2	7.0
Indiana	NA	NA	87.8	15.2	96.4	16.6	NA	NA
Iowa	81.3	10.2	89.2	7.6	88.3	7.3	76.8	6.4
Kansas	69.8	8.8	70.6	9.8	70.5	7.6	55.4	13.8
Kentucky	86.5	13.8	89.7	19.5	91.0	29.0	81.6	12.0
Louisiana	NA	7.3	96.0	10.4	98.2	10.2	68.4	8.8
Maine	100.0	91.0	100.0	92.1	100.0	91.0	100.0	87.1
Maryland	NA	NA	71.3	9.8	91.9	12.5	NA	NA
Massachusetts	NA	NA	63.0	20.6	77.8	26.9	NA	NA
Michigan	58.4	6.6	63.9	9.1	67.0	9.1	41.1	5.0
Minnesota	94.9	42.1	98.9	40.2	96.8	40.4	98.3	78.1
Mississippi	NA	NA	95.1	39.6	97.6	41.5	NA	27.1
Missouri	78.8	17.9	80.1	21.6	82.8	24.4	69.2	12.7
Montana	NA	2.8	91.7	3.1	91.7	3.3	68.2	0.9
Nebraska	76.0	17.2	75.7	26.6	71.9	20.3	75.1	40.8
Nevada	72.4	3.1	71.9	1.9	75.3	1.6	56.6	20.7
New Hampshire	NA	NA	93.1	52.5	97.7	56.2	91.9	21.5
New Jersey	NA	NA	58.7	47.1	74.8	56.2	NA	NA
New Mexico	59.9	13.6	73.1	28.5	62.9	2.2	45.9	12.9
New York	NA	NA	64.6	8.3	NA	10.3	NA	NA
North Carolina	89.8	25.6	93.2	38.8	97.3	61.2	82.3	18.0
North Dakota	74.6	27.0	89.8	19.6	87.8	18.2	18.9	27.9
Ohio	NA	NA	65.8	5.8	71.5	7.3	41.7	1.2
Oklahoma	74.7	3.5	83.2	4.8	84.8	6.6	57.9	1.8
Oregon	NA	NA	98.6	16.9	98.4	19.3	98.7	12.0
Pennsylvania	NA	13.5	64.7	14.2	74.1	18.8	57.4	12.1
Rhode Island	NA	NA	83.7	18.3	94.4	17.2	49.3	33.7
South Carolina	97.9	86.8	98.7	86.6	99.2	85.7	96.7	88.3
South Dakota	83.3	30.9	83.8	21.9	83.7	26.2	73.5	20.8
Tennessee	NA	NA	91.8	38.6	94.8	48.7	66.7	19.9
Texas	54.1	14.3	60.6	18.2	83.6	20.8	36.5	15.8
Utah	82.1	8.4	82.8	8.9	81.7	8.8	77.6	9.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	71.1	12.4	78.2	9.9	85.7	17.6	57.6	8.5
Washington	NA	NA	89.3	23.9	86.0	25.0	NA	NA
West Virginia	NA	NA	55.2	12.2	55.0	14.4	28.9	NA
Wisconsin	69.3	19.2	82.4	27.4	92.1	37.7	35.9	15.4
Wyoming	NA	NA	81.8	2.5	93.5	3.4	83.8	2.5
Total	64.8	14.5	71.2	17.9	78.4	19.6	49.4	14.5

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998							
	August		July		June		May	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	72.0	12.9	71.8	14.5	74.7	14.5	35.4	13.3
Alaska	57.0	NA	56.0	96.5	53.6	100.0	55.9	100.0
Arizona	82.7	32.6	84.1	32.8	86.2	33.8	83.3	35.8
Arkansas	46.1	8.7	48.8	7.7	NA	9.0	88.7	9.0
California	24.6	8.2	31.4	9.5	52.9	11.2	48.3	11.7
Colorado	^R 91.3	NA	NA	NA	91.8	NA	95.0	1.0
Connecticut	58.1	51.5	62.4	57.1	61.2	52.9	76.3	55.7
Delaware	100.0	11.3	100.0	17.8	100.0	19.3	100.0	19.5
District of Columbia	35.4	—	40.4	—	41.9	—	47.7	—
Florida	96.3	6.1	96.0	4.2	96.6	4.3	96.7	3.5
Georgia	68.9	7.0	68.9	5.1	79.0	15.1	82.0	15.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	83.1	3.5	83.9	2.7	85.3	1.8	85.4	2.2
Illinois	37.9	6.0	35.4	4.9	45.8	5.2	34.8	6.8
Indiana	NA	NA	NA	NA	NA	4.2	76.7	6.2
Iowa	79.7	5.2	69.6	5.3	70.3	4.5	87.3	5.4
Kansas	59.9	10.4	58.8	13.4	54.2	10.7	68.5	8.1
Kentucky	78.9	11.6	76.4	15.2	82.6	13.8	84.2	14.7
Louisiana	69.5	7.5	69.7	6.9	NA	7.0	96.5	7.3
Maine	100.0	85.7	100.0	84.1	100.0	87.9	100.0	84.1
Maryland	31.1	6.2	29.0	2.5	33.3	NA	29.7	9.0
Massachusetts	51.3	18.1	48.4	16.8	46.3	NA	52.8	28.8
Michigan	35.9	3.8	38.1	4.4	40.8	4.8	42.2	5.9
Minnesota	98.1	36.9	97.2	34.8	98.2	40.7	98.5	35.1
Mississippi	NA	NA	^R 94.3	NA	^R 94.9	NA	^R 93.6	NA
Missouri	43.6	12.2	65.6	16.4	69.4	13.0	75.7	14.0
Montana	73.4	1.2	69.1	0.7	75.3	4.4	NA	1.2
Nebraska	81.5	10.4	65.6	5.7	66.3	13.5	74.0	14.8
Nevada	56.4	19.1	66.3	4.0	70.9	4.6	71.9	4.8
New Hampshire	NA	NA	89.1	34.9	NA	32.7	94.3	38.9
New Jersey	50.0	33.4	47.4	25.6	51.5	27.7	46.0	26.4
New Mexico	45.9	15.1	46.7	17.9	39.7	13.9	^R 48.8	^R 10.0
New York	^R 45.7	NA	^R 49.6	NA	^R 47.4	^R 6.9	NA	NA
North Carolina	83.8	21.3	83.3	26.4	82.5	24.3	86.7	26.9
North Dakota	67.7	18.9	80.8	22.9	82.1	24.3	79.2	15.4
Ohio	35.3	0.8	NA	NA	44.7	1.3	41.4	1.5
Oklahoma	56.4	1.8	55.4	2.1	63.6	2.2	70.4	2.9
Oregon	98.7	13.4	98.9	NA	98.9	14.9	98.8	15.0
Pennsylvania	NA	11.6	51.4	12.3	54.9	12.7	59.4	13.2
Rhode Island	100.0	34.2	48.5	31.2	53.3	33.4	^R 58.6	NA
South Carolina	96.8	88.1	97.4	87.5	97.4	88.2	98.2	87.7
South Dakota	74.8	17.1	75.4	22.5	72.8	24.9	65.9	15.8
Tennessee	63.0	21.3	63.7	20.3	66.6	23.3	77.4	23.9
Texas	34.2	14.7	48.8	12.1	63.8	15.2	55.9	14.1
Utah	71.6	8.7	70.7	7.5	75.6	9.1	73.7	8.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	50.8	13.2	69.4	8.4	66.8	9.3	70.0	13.0
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	25.6	NA	7.6	NA	NA	NA	29.0	NA
Wisconsin	^R 48.0	12.3	45.1	12.6	52.4	15.5	53.8	15.1
Wyoming	^R 91.8	NA	NA	NA	NA	2.3	89.8	1.8
Total	^R 46.8	13.6	^R 51.3	^R 12.7	^R 59.9	^R 13.9	^R 60.2	13.9

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998							
	April		March		February		January	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	80.2	14.8	77.8	17.4	80.1	17.8	76.7	19.4
Alaska	57.4	100.0	57.6	100.0	60.0	100.0	59.9	100.0
Arizona	84.9	32.7	86.7	34.0	87.2	27.7	86.9	32.3
Arkansas	89.5	9.1	93.9	10.2	95.3	10.9	95.5	10.5
California	52.7	10.9	71.1	16.5	54.3	8.7	58.1	11.0
Colorado	95.8	0.8	96.0	1.2	95.2	1.2	95.4	2.5
Connecticut	62.3	61.9	71.2	59.4	78.2	57.8	78.4	61.0
Delaware	100.0	23.3	100.0	27.9	100.0	28.6	100.0	26.4
District of Columbia	52.5	—	60.1	—	59.0	—	60.2	—
Florida	96.8	4.5	96.2	4.4	96.3	4.0	96.3	4.5
Georgia	85.5	13.4	87.5	17.2	90.3	16.7	88.7	16.5
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	86.4	2.2	88.1	2.0	88.7	3.0	90.0	2.5
Illinois	44.3	9.1	55.3	10.6	50.4	9.8	53.7	10.7
Indiana	NA	NA	88.6	12.3	84.6	11.1	85.7	11.2
Iowa	82.8	19.9	72.1	22.8	88.7	7.1	87.4	7.4
Kansas	69.5	5.6	76.9	5.5	73.1	5.3	71.5	5.1
Kentucky	85.7	14.7	90.0	13.1	86.5	17.2	90.0	12.3
Louisiana	98.1	7.2	58.2	9.8	60.9	6.0	74.1	5.4
Maine	100.0	97.9	100.0	97.9	100.0	97.9	100.0	97.9
Maryland	42.9	1.6	50.9	5.1	54.7	3.7	65.6	0.7
Massachusetts	60.0	27.5	65.5	29.0	61.4	32.5	64.3	30.3
Michigan	58.3	9.6	64.3	12.1	65.2	12.6	69.5	13.5
Minnesota	96.1	38.9	96.2	48.8	93.3	37.4	91.9	45.0
Mississippi	^R 93.3	NA	^R 89.6	NA	94.8	38.5	^R 95.3	NA
Missouri	82.0	17.4	83.3	21.5	85.4	24.0	85.2	23.7
Montana	79.4	2.2	83.1	3.5	83.1	4.3	88.3	4.7
Nebraska	71.5	21.3	77.3	24.0	78.0	23.2	79.9	30.1
Nevada	73.2	5.8	75.9	7.1	79.8	15.3	77.3	7.2
New Hampshire	96.2	47.0	96.1	39.1	96.2	37.2	96.4	30.4
New Jersey	55.2	29.2	62.4	29.5	62.1	34.6	59.4	31.7
New Mexico	^R 57.3	^R 6.5	^R 66.7	1.5	^R 63.8	1.8	^R 71.1	^R 8.2
New York	58.1	10.1	NA	10.1	NA	NA	NA	NA
North Carolina	90.6	31.2	91.1	26.6	93.1	27.3	93.4	27.6
North Dakota	80.0	25.3	87.0	32.1	84.9	33.3	89.1	36.1
Ohio	53.9	2.7	60.1	3.2	60.2	4.7	60.5	4.5
Oklahoma	75.0	4.9	77.7	5.2	83.2	5.2	81.1	6.3
Oregon	NA	NA	NA	NA	99.2	15.3	99.3	19.7
Pennsylvania	NA	13.3	57.7	14.2	57.2	15.2	58.7	16.3
Rhode Island	NA	41.2	64.7	49.9	71.6	38.5	64.5	39.7
South Carolina	98.4	86.0	98.2	84.9	98.4	85.4	98.1	85.8
South Dakota	93.7	56.2	85.6	37.9	85.7	45.9	86.5	45.2
Tennessee	75.8	29.3	93.1	28.1	87.8	25.5	NA	NA
Texas	59.8	14.5	61.3	15.2	71.6	15.5	68.3	12.3
Utah	82.5	7.9	81.2	8.6	89.1	8.5	85.7	7.8
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	70.9	11.2	73.4	19.2	76.7	14.6	74.4	18.7
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	50.3	5.8	51.9	6.2	55.5	14.9	56.0	6.3
Wisconsin	72.9	19.3	77.6	23.4	80.3	23.8	85.4	26.0
Wyoming	^R 92.1	3.4	87.4	NA	80.3	NA	NA	1.5
Total	67.0	15.0	^R71.6	16.5	71.0	15.3	72.4	14.9

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	Total		December		November		October	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	64.7	24.6	80.9	27.9	69.1	26.4	51.0	24.5
Alaska	54.5	97.8	54.2	100.0	51.9	100.0	52.2	100.0
Arizona	84.6	25.1	85.2	33.0	83.2	31.2	81.1	30.2
Arkansas	94.2	10.5	95.9	10.4	90.4	11.2	92.6	9.7
California	50.7	8.9	52.9	9.3	49.4	7.4	41.9	6.1
Colorado	92.8	23.6	93.0	23.7	89.8	25.1	86.9	28.3
Connecticut	81.9	66.4	77.0	61.7	71.1	65.9	68.6	65.9
Delaware	100.0	31.0	100.0	28.1	100.0	28.0	100.0	29.9
District of Columbia	54.9	100.0	55.9	100.0	60.4	100.0	44.5	100.0
Florida	97.5	10.0	96.0	8.4	96.4	8.1	97.5	8.8
Georgia	89.1	26.7	91.6	32.7	88.6	27.6	85.6	30.8
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	86.1	2.0	86.6	2.0	83.2	1.8	76.4	1.5
Illinois	54.3	11.5	52.1	11.9	52.5	9.4	50.4	9.1
Indiana	89.8	16.0	94.1	15.4	96.0	22.6	93.9	16.1
Iowa	88.2	8.6	89.3	9.3	85.0	13.4	80.1	11.5
Kansas	70.7	9.5	73.3	7.5	66.0	9.9	73.6	9.9
Kentucky	90.0	19.2	91.3	17.6	89.9	18.7	89.9	19.5
Louisiana	95.9	10.1	96.5	7.9	95.1	9.3	94.7	9.9
Maine	100.0	91.4	100.0	88.7	100.0	91.4	100.0	88.4
Maryland	67.1	7.4	52.7	1.1	64.7	3.3	51.8	7.0
Massachusetts	62.6	20.2	68.5	19.2	62.9	21.0	48.7	16.8
Michigan	63.7	9.0	65.6	11.8	64.8	9.5	54.2	4.0
Minnesota	98.8	40.4	98.5	40.9	99.1	42.9	98.6	38.7
Mississippi	94.8	39.6	95.0	41.1	94.0	38.0	91.2	40.2
Missouri	79.9	21.8	82.6	23.3	78.3	23.8	68.6	19.7
Montana	91.4	3.1	92.8	3.7	90.5	2.8	88.1	2.3
Nebraska	74.2	27.0	77.2	25.6	72.3	41.2	50.0	22.2
Nevada	71.4	1.8	72.7	2.1	67.9	1.6	65.9	1.2
New Hampshire	92.4	48.8	93.9	32.4	89.1	34.2	85.7	44.2
New Jersey	56.2	47.0	52.0	49.0	48.2	48.3	47.0	42.8
New Mexico	74.6	5.7	81.5	7.8	78.0	6.8	67.0	4.6
New York	64.7	8.5	67.8	10.3	65.7	10.0	59.3	7.6
North Carolina	94.4	45.5	95.7	35.7	99.4	81.7	98.2	73.8
North Dakota	88.9	18.5	84.4	15.3	90.5	17.7	83.2	11.9
Ohio	65.6	5.7	67.1	7.3	67.3	6.1	55.1	2.7
Oklahoma	81.8	4.7	81.8	5.4	71.4	4.3	76.9	3.1
Oregon	98.5	16.3	98.4	16.0	98.4	14.5	97.5	14.1
Pennsylvania	63.6	14.2	63.9	15.3	63.8	14.8	50.1	12.6
Rhode Island	80.5	17.5	64.0	11.4	80.7	13.5	71.1	21.1
South Carolina	98.8	86.9	98.0	84.7	100.0	89.1	99.9	89.8
South Dakota	83.3	24.1	86.0	34.2	84.0	37.4	68.3	17.8
Tennessee	92.2	38.3	92.9	35.3	95.0	39.8	89.9	37.3
Texas	61.4	17.3	68.3	14.6	63.7	14.1	55.0	14.7
Utah	83.3	8.9	86.1	8.2	83.1	9.5	80.2	8.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	77.9	13.0	71.3	19.4	90.2	28.8	71.2	18.6
Washington	84.1	23.5	93.4	19.3	54.5	24.0	90.6	25.0
West Virginia	54.6	12.2	58.9	11.7	53.4	12.7	38.7	12.8
Wisconsin	82.1	27.1	83.1	26.6	85.9	27.6	69.3	24.3
Wyoming	84.2	2.5	96.2	2.7	88.2	1.8	87.9	2.7
Total	70.8	17.7	72.8	17.2	70.4	18.0	62.9	16.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	September		August		July		June	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	40.8	24.3	31.8	24.7	29.1	25.5	57.7	23.1
Alaska	49.9	100.0	45.0	92.8	49.9	91.4	50.4	99.0
Arizona	83.9	29.5	78.7	29.3	79.8	30.5	82.7	18.2
Arkansas	91.3	8.3	91.8	7.3	90.3	8.5	91.1	9.8
California	41.0	8.6	41.7	7.2	45.8	7.3	48.7	8.4
Colorado	90.2	24.6	83.1	23.6	86.2	33.3	92.9	25.7
Connecticut	75.0	64.2	80.2	60.8	76.0	62.2	79.7	62.5
Delaware	100.0	27.7	100.0	28.4	100.0	28.4	100.0	29.1
District of Columbia	35.5	100.0	38.8	100.0	43.9	100.0	46.7	100.0
Florida	97.8	8.9	97.9	9.3	97.7	9.5	98.2	10.6
Georgia	82.9	15.5	81.9	26.1	81.0	27.6	84.3	22.5
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	82.5	1.7	82.9	1.4	83.2	2.0	83.3	2.3
Illinois	47.7	12.1	40.3	6.2	46.7	4.0	55.8	17.0
Indiana	87.2	10.3	86.8	9.5	85.4	11.0	59.4	11.3
Iowa	77.9	6.7	85.1	6.7	75.8	6.1	92.7	5.8
Kansas	57.3	10.9	52.2	11.9	54.0	9.2	65.4	8.2
Kentucky	84.9	16.3	80.3	14.4	84.0	15.4	88.6	16.8
Louisiana	94.3	9.0	95.1	9.9	95.2	9.9	95.2	10.4
Maine	100.0	86.7	100.0	87.6	100.0	100.0	100.0	87.4
Maryland	48.6	2.7	50.4	6.4	51.6	4.4	56.1	8.6
Massachusetts	43.8	16.6	41.3	13.6	46.0	14.4	48.5	21.6
Michigan	39.7	2.7	40.7	3.4	55.7	3.7	45.7	5.1
Minnesota	97.7	42.0	98.2	34.8	98.4	36.2	98.7	37.9
Mississippi	91.0	42.9	93.6	38.6	96.1	35.0	92.5	38.2
Missouri	68.3	22.6	68.4	17.0	68.3	18.4	71.3	19.0
Montana	85.7	1.9	87.5	1.9	90.5	1.7	88.8	2.2
Nebraska	63.2	26.5	69.2	18.6	67.6	41.2	68.6	20.6
Nevada	63.0	1.1	63.2	1.6	73.3	1.8	61.0	1.8
New Hampshire	87.2	49.6	88.1	47.0	87.0	50.6	90.7	53.3
New Jersey	47.2	43.6	47.8	57.0	44.8	42.1	50.1	41.4
New Mexico	63.3	7.0	63.7	8.8	63.9	8.9	54.0	3.9
New York	56.2	7.4	54.7	7.7	53.3	6.0	53.6	5.8
North Carolina	86.9	25.2	85.0	21.1	85.2	24.3	97.6	46.3
North Dakota	72.5	8.4	65.5	12.6	81.5	13.9	79.1	11.0
Ohio	50.5	2.2	49.3	2.9	47.5	2.9	50.2	2.8
Oklahoma	69.9	3.2	68.1	3.0	74.1	3.9	75.5	2.1
Oregon	98.0	12.1	98.3	11.4	98.3	13.3	98.1	16.7
Pennsylvania	57.8	12.1	58.4	12.4	55.8	10.9	56.4	13.1
Rhode Island	68.7	17.1	67.9	20.7	71.1	15.2	72.4	18.6
South Carolina	98.8	87.5	97.0	85.3	99.9	91.1	100.0	90.0
South Dakota	59.9	14.0	72.1	12.6	78.3	12.0	83.7	11.4
Tennessee	85.3	33.1	84.9	29.4	85.2	35.1	81.6	38.7
Texas	52.9	15.2	51.7	15.4	51.2	15.0	55.0	20.4
Utah	74.8	11.7	71.7	7.7	72.8	8.0	77.0	9.1
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	70.8	10.0	65.3	6.4	63.6	7.0	66.2	10.3
Washington	78.9	19.2	87.7	17.8	86.2	21.7	87.0	26.2
West Virginia	32.7	12.0	25.2	11.6	26.8	12.1	31.9	11.5
Wisconsin	62.9	21.3	55.4	19.6	67.9	18.8	60.6	18.4
Wyoming	87.2	3.1	84.9	2.7	43.9	2.8	67.8	2.5
Total	59.5	15.1	57.9	15.6	59.5	15.3	61.7	17.4

See footnotes at end of table.

**Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State,
1996-1998 — Continued**

State	1997							
	May		April		March		February	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	63.4	23.9	66.9	22.8	81.7	23.3	84.5	25.3
Alaska	54.8	99.0	57.1	98.7	57.7	98.6	59.0	97.9
Arizona	86.1	17.5	83.9	19.6	86.5	19.5	87.9	21.9
Arkansas	91.8	11.2	93.8	10.8	95.2	11.9	96.7	13.5
California	50.3	12.4	52.8	10.0	54.8	10.3	59.6	10.9
Colorado	93.7	24.1	93.9	28.5	94.4	17.9	95.4	16.0
Connecticut	80.3	64.4	87.2	67.1	87.1	67.0	90.2	77.9
Delaware	100.0	35.4	100.0	36.8	100.0	33.7	100.0	35.0
District of Columbia	53.7	100.0	48.4	100.0	59.9	100.0	62.8	100.0
Florida	98.3	9.8	98.3	10.7	97.7	10.3	97.4	12.5
Georgia	85.4	21.5	88.5	25.5	90.0	24.9	93.5	32.7
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	86.5	2.5	86.1	2.1	87.8	2.1	89.7	2.2
Illinois	48.4	15.9	54.1	9.8	55.4	11.9	55.3	11.3
Indiana	58.0	11.7	91.1	12.9	93.4	15.4	96.7	23.5
Iowa	83.8	6.1	93.5	8.1	89.0	8.3	90.7	8.1
Kansas	67.1	9.4	72.6	9.4	67.1	9.5	72.1	10.6
Kentucky	86.3	19.4	89.0	18.5	90.3	19.1	91.5	23.6
Louisiana	95.3	11.2	95.5	9.5	96.6	10.4	97.1	11.3
Maine	100.0	90.3	100.0	90.5	100.0	91.0	100.0	100.0
Maryland	62.0	15.9	71.5	2.2	77.6	21.7	81.9	18.6
Massachusetts	69.9	19.3	74.1	25.0	72.8	21.8	69.0	25.0
Michigan	58.6	7.7	66.2	10.3	67.3	12.5	70.2	14.3
Minnesota	98.9	39.5	98.9	42.2	98.9	43.2	98.9	45.9
Mississippi	92.5	43.3	93.2	38.1	96.3	39.2	96.7	40.3
Missouri	76.9	24.2	80.7	17.0	83.8	26.5	80.0	19.9
Montana	90.3	2.1	91.2	4.5	92.0	4.0	93.1	4.0
Nebraska	67.0	25.8	77.5	21.8	74.2	25.4	91.9	31.8
Nevada	64.8	1.8	69.3	2.1	78.1	2.1	79.8	2.5
New Hampshire	91.6	58.5	92.0	61.7	94.0	53.1	96.2	48.5
New Jersey	45.7	43.3	55.9	49.6	58.4	45.7	89.2	44.0
New Mexico	68.1	5.3	66.9	1.4	77.3	1.9	79.0	1.0
New York	59.1	7.0	67.8	8.5	69.3	9.5	72.2	10.1
North Carolina	89.4	26.5	88.0	26.5	91.9	35.1	96.0	45.0
North Dakota	88.1	18.2	91.7	16.5	91.2	35.5	93.8	27.0
Ohio	58.9	4.6	65.7	4.7	70.1	7.9	69.3	8.1
Oklahoma	80.6	4.2	82.8	3.8	84.9	6.0	87.9	8.8
Oregon	98.5	17.3	98.5	20.4	98.8	21.0	98.9	22.5
Pennsylvania	50.1	13.2	66.2	14.1	65.8	15.5	71.2	15.0
Rhode Island	80.8	18.8	88.5	23.9	82.2	22.9	91.7	14.9
South Carolina	100.0	89.3	96.0	81.4	97.8	83.6	98.3	81.8
South Dakota	80.7	17.3	85.7	22.6	86.3	26.7	85.7	30.4
Tennessee	90.5	50.5	92.6	39.4	92.8	34.4	94.4	40.3
Texas	55.8	19.2	58.2	21.3	62.7	18.1	70.0	18.2
Utah	78.8	8.7	83.7	9.0	83.0	6.5	87.1	10.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	75.1	8.8	75.3	16.2	79.4	17.5	83.7	8.4
Washington	87.7	21.6	89.3	27.6	91.3	28.0	91.7	27.6
West Virginia	47.2	11.6	52.9	7.3	62.3	20.4	69.7	15.1
Wisconsin	77.4	26.1	83.3	24.4	88.5	32.7	88.2	34.6
Wyoming	87.1	2.4	76.0	2.6	84.6	2.5	89.9	2.5
Total	65.5	18.1	71.8	18.4	74.0	18.8	78.4	19.7

^R = Revised Data.

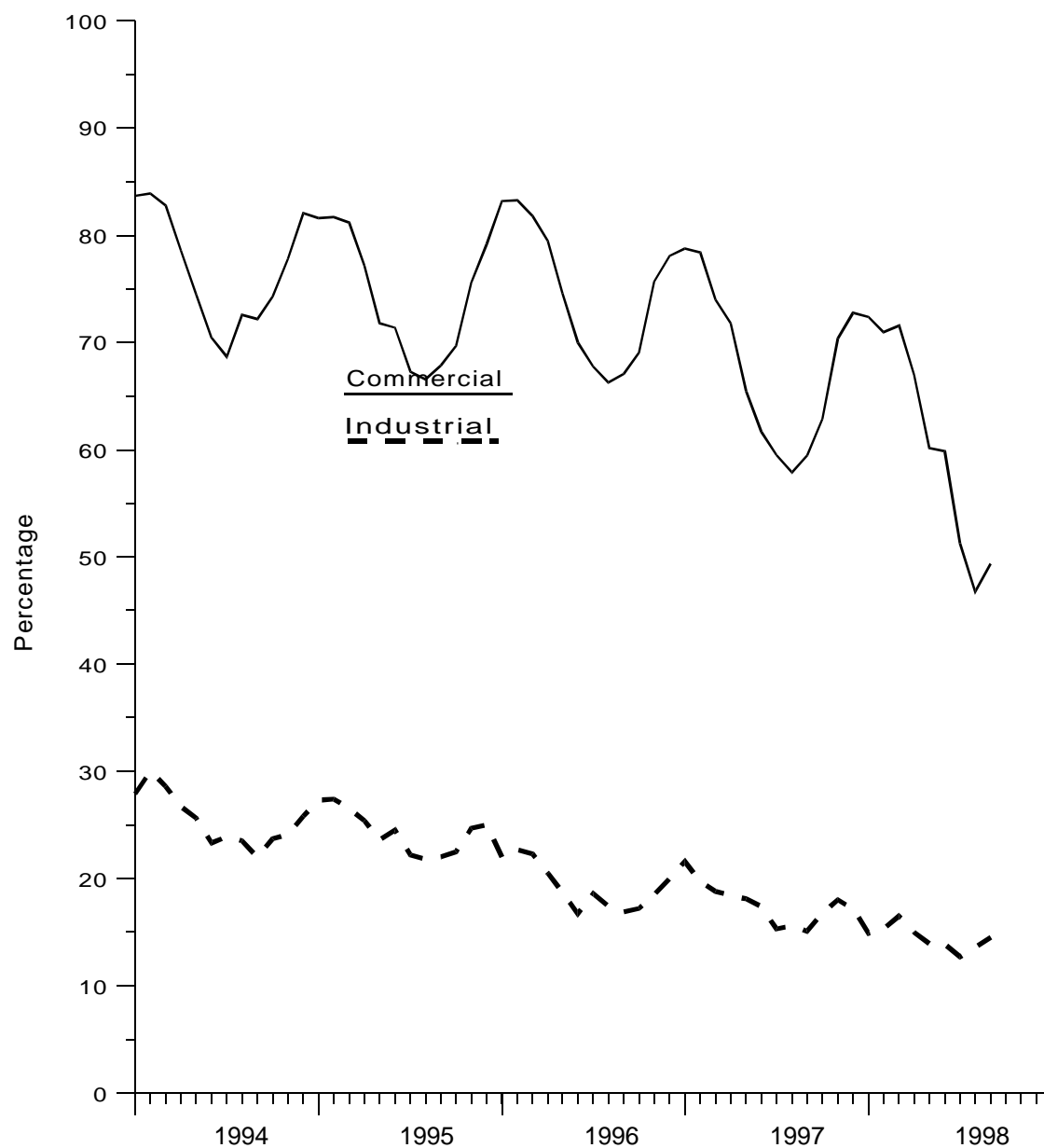
NA = Not Available.

— = Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1994-1998



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 26. Gas Home Customer-Weighted Heating Degree Days

Census Divisions	November 1 through November 30				
	Normal ^a	1997	1998	Percent Change	
				Normal to 1998	1997 to 1998
New England					
CT, ME, MA, NH, RI, VT	417	480	424	2.0	-12.0
Middle Atlantic					
NJ, NY, PA	367	391	340	-7.0	-13.0
East North Central					
IL, IN, MI, OH, WI	401	430	351	-13.0	-18.0
West North Central					
IA, KS, MN, MO, ND, NE, SD	388	407	333	-14.0	-18.0
South Atlantic					
DE, FL, GA, MD and DC, NC, SC, VA, WV	205	233	188	-8.0	-19.0
East South Central					
AL, KY, MS, TN	203	232	146	-28.0	-37.0
West South Central					
AR, LA, OK, TX	81	109	42	-48.0	-62.0
Mountain					
AZ, CO, ID, MT, NV, NM, UT, WY	395	416	414	5.0	-1.0
Pacific ^b					
CA, OR, WA	136	132	172	27.0	30.0
U.S. Average ^b	285	307	263	-8.0	-14.0

^a Normal is based on calculations of data from 1961 through 1990.

^b Excludes Alaska and Hawaii.

Note: See Appendix A, Explanatory Note 10 for discussion of Heating Degree-Days computations.

Sources: National Oceanic and Atmospheric Administration.

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables 1, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting

volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for non-hydrocarbon gas removed, gas used for repressuring,

and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for non-hydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C,

"Statistical Considerations," for a detailed explanation of sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.
- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual*.

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or "dome" formations), depleted fields (depleted reservoirs in oil and/or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability

is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

A preliminary estimate of the U.S. gas price is made each month based on the change in the production-weighted gas price from five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas. Gas prices for these five States are used because both their gas production and value represent a substantial sample of the U.S. gas production and value (roughly 50 percent), and their prices are readily available and provide a consistent series. The latest preliminary U.S. gas price estimate is calculated by multiplying the preliminary U.S. gas price estimate for the prior month by the ratio of the five States' gas price for the latest month to that

of the prior month. This estimate replaces the initial gas price estimate.

Final Monthly Data

Preliminary monthly gas price data for Kansas, Mississippi, New Mexico, Oklahoma, and Texas are replaced by final monthly data that are adjusted to match the annual prices published in the *Natural Gas Annual* for each State. A revised set of the monthly U.S. gas price estimates are derived based on the monthly change in the production-weighted prices for these five States and adjusted to match the U.S. gas price published in the *Natural Gas Annual*.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual*. For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply/disposition.

Note 10. Heating Degree-Days

Heating degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information pub-

lished in the Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and four monthly surveys.

The annual reports are the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines, and the Form EIA-627, a voluntary survey completed by energy or conservation agencies in the gas-producing States.

The monthly reports include two surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and/or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1996 for report year 1995 totaled 1,991 questionnaire packages. To this original mailing, 11 names were added and 61 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,941 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents followup, 1,911 responses were entered into the data base, and there were 30 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels

and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual*.

Form EIA-895, "Monthly Quantity of Natural Gas Report"

Survey Design

In 1996, an annual schedule was added to the Form EIA-895 to replace the Form EIA-627. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." In 1994, the IOGCC decided to discontinue collection of their form. All gas producing States are requested to report on the Form EIA-895; a voluntary report. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627. This form was designed by EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. The form was redesigned in 1990 to collect monthly breakdowns of all annual data elements. Data are not considered proprietary. It was also designed to avoid duplication of effort in collecting production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period.

Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Summary of Data Requirements

The Form EIA-895 monthly schedule consists of nine questions on one page, and requires volumetric information on gross production (gas and oil wells individually), gas used for repressuring, gas vented and flared, nonhydrocarbon gases removed, natural gas used as fuel on leases, marketed production, value based marketed production and the value in dollar amount of the marketed production.

Form EIA-895 annual schedule collects data on the monthly and annual production volume of natural gas (including gross withdrawals from both gas and oil wells); volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on leases; marketed production; the value of marketed production; and the number of producing gas wells.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual*.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 are a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/ FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 103 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day

withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural

Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different.

Prior to 1995, the Form FPC-14 was filed annually by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export was originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of 382 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors--residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability

proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata--companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors--the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value (C_j) were included in the certainty stratum. The formula for C_j was:

$$C_j = \frac{X_j}{2n} \quad (1)$$

where:

C_j = cutoff value for consumer sector j,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j,

X_i = the sum within State of annual gas volumes for company i,

X_j = the sum within State of annual gas volumes in consumer sector j,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors (X_i). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n \frac{X_2}{X_{..}} \quad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X_2 = the sum within State of the X_i for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using

$(I = \frac{X_2}{m})$. A uniform random number R was selected

between zero and I. The first sampled company was

the first company on the list to have a cumulative measure of size greater than R. The second company selected was the first company on the list to have a cumulative measure of size greater than $R + I$. $R + I$ was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X_2 was the sum within State of the X_i for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_j}{Y'_{.j}} \quad (3)$$

where:

Y_j = the sum within State of annual gas volumes in consumer sector j for all companies,

$Y'_{.j}$ = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_j = y_j \times E_{vj} \quad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector j,

y_j = the sum within State of reported monthly gas volumes in consumer sector j.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V'_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{y_{.jt}}{y_{.jt-1}} \quad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

$y_{.jt}$ = gas volume reported by companies in the State stratum for report month t,

$y_{.jt-1}$ = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*.

The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V_{jm}^* = V_{jm} + \left[(V_{ja} - V'_{jm}) \left(\frac{V_{jm}}{V'_{jm}} \right) \right] \quad (6)$$

where:

V_{jm}^* = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate. The formula for revising the estimated revenue is:

$$R_{jm}^* = R_{jm} + \left[(R_{ja} - R'_{jm}) \left(\frac{R_{jm}}{R'_{jm}} \right) \right] \quad (7)$$

where:

R_{jm}^* = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection

and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of non-sampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^H \left[N_h^2 \frac{(1 - \frac{n_h}{N_h})}{n_h(n_h - 1)} \left(\sum_{i=1}^{n_h} (y_i - T x_i)^2 \right) \right] \quad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h

n_h = the sample size in stratum h

y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, September 1998

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	159	97	2,449	2,456	0.56	0.28	1.77
Alaska	0	0	NA	NA	—	—	NA
Arizona	13	95	0	96	0.23	0.06	—
Arkansas	0	0	0	0	—	—	—
California	225	417	4,946	4,968	0.06	0.07	0.32
Colorado	367	472	752	961	6.81	0.51	1.61
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	232	442	1,658	1,732	4.28	0.92	0.29
Georgia	76	113	5,490	5,492	0.43	0.79	2.92
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	591	1,530	2,597	3,072	0.89	2.34	0.36
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	45	497	156	522	0.80	0.42	0.21
Kansas	2,638	5,076	18,793	19,645	2.61	0.98	3.60
Kentucky	389	542	395	776	3.28	3.76	3.63
Louisiana	109	80	2,243	2,247	0.24	0.31	0.02
Maine	0	0	0	0	—	—	—
Maryland	NA	NA	NA	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA	NA	NA	NA
Michigan	0	0	0	0	—	—	—
Minnesota	210	196	3,527	3,539	0.15	0.09	0.30
Mississippi	NA	NA	2,269	NA	NA	NA	0.35
Missouri	292	121	725	791	0.03	0.24	2.64
Montana	2	4	0	4	0.02	0.08	—
Nebraska	15	12	490	491	0.22	0.14	0.25
Nevada	0	0	0	0	—	—	—
New Hampshire	0	0	0	0	—	—	—
New Jersey	NA	NA	NA	NA	NA	NA	NA
New Mexico	36	140	588	605	0.45	1.25	—
New York	NA	NA	NA	NA	NA	NA	NA
North Carolina	61	114	200	238	0.01	0.02	0.25
North Dakota	0	0	0	0	—	—	—
Ohio	96	208	947	974	0.49	0.10	0.37
Oklahoma	166	156	22	229	0.45	0.03	1.06
Oregon	0	0	0	0	—	—	—
Pennsylvania	NA	165	471	NA	NA	0.27	0.04
Rhode Island	0	0	0	0	—	—	—
South Carolina	84	108	406	429	1.14	0.33	0.14
South Dakota	0	0	0	0	—	—	—
Tennessee	338	974	2,074	2,316	2.55	2.90	2.10
Texas	76	1,560	9,091	9,224	0.04	0.31	0.19
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	24	243	437	500	0.29	0.18	0.57
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	1,068	NA	NA	NA	12.68	NA
Wisconsin	2,143	5,824	4,923	7,922	0.21	0.39	0.50
Wyoming	8	51	46	69	0.38	0.34	1.22
Total	3,574	8,417	24,070	25,749	0.25	0.18	0.27

NA = Not Available.

— = Not Applicable.

Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1995*, DOE/EIA-0131(95), November 1996.
- *Natural Gas Annual 1993 Supplement: Company Profiles*, DOE/EIA-0131(93/S), February 1995.
- *Natural Gas 1996 Issues and Trends*, DOE 0560(96), December 1996.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Natural Gas 1995: Issues and Trends*, DOE/EIA-0560(95), November 1995.
- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report*, DOE/EIA-0216(95)/Advance Summary, October 1996.
- *Annual Energy Review 1995*, DOE/ EIA-0384(95), July 1996. Published annually.
- *Annual Report to Congress 1995 DOE/ EIA-01733(95)*, July 1996. Published annually.
- *Annual Energy Outlook 1996*, DOE/ EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

- *The Value of Underground Storage in Today's Natural Gas Industry*, DOE/EIA-0591, March 1995.
- *Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995*, DOE/EIA-0542(95), July 1994.
- *Largest U.S. Oil and Gas Fields*, DOE/EIA-TR-0567, August 1993.
- *Energy Policy Act Transportation Rate Study*, DOE/EIA-0571, October 1993.
- *Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates*, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(95), January 1996.
- *Oil and Gas Field Code Master List, 1995*, EIA-0370(95), December 1996.

Feature Articles

June 1996

Natural Gas Industry Restructuring and Data Collection

(Discusses how restructuring of the natural gas industry has impacted the natural gas data collection efforts.)

July 1996

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

November 1996

U.S. Natural Gas Imports and Exports - 1995

(Contains final 1995 data on all U.S. imports and exports of natural gas.)

December 1996

Crosswell Seismology -- A View from Aside

(Discusses crosswell seismology and its geologic and economic implications for the domestic oil and gas industry.)

May 1997

Restructuring Energy Industries: Lessons from Natural Gas

(Compares and contrasts the natural gas and electric power industries.)

July 1997

Intricate Puzzle of Oil and Gas "Reserves Growth"

(Discusses the factors that affect ultimate recovery estimates of a field or reservoir.)

August 1997

Natural gas Residential Pricing Developments During the 1996-97 Winter

(Discusses key factors that affect pricing patterns, highlights the effects of weather, utilization patterns of natural gas storage, and pricing mechanisms used in natural gas markets.)

December 1997

Recent Trends in Natural Gas Spot Prices

(Focuses primarily on conditions and developments in the East Consuming Region and their connection to prices at the Henry Hub in the Producing Region.)

March 1998

EIA Corrects Errors in EIA's Drilling Activity Estimates Series

(Discusses and corrects errors in EIA's monthly and annual estimates of oil and gas drilling activity.)

Special Focuses

January 1997

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity in the lower 48 States from 1985 and 1996 and project this capacity for 1996 and 1997.)

Outlook for Natural Gas Through 2015

(Presents an outlook for natural gas through 2015.)

August 1997

Worldwide Natural Gas Supply and Demand And the Outlook For Global LNG Trade

(Focuses on natural gas into the next century with emphasis on world natural gas supply and demand to 2015.)

September 1997

Advance Summary: U.S. Crude Oil, Natural Gas, and Natural gas Liquids Reserves, 1996 Annual Report - Advance Summary

(Focuses on proved reserves of domestic crude oil, natural gas, and natural gas liquids.)

May 1998

Deliverability on the Interstate Natural Gas Pipeline System

(Examines the capability of the interstate pipeline network to move gas to various U.S. markets and discusses changes occurring since 1990.)

Special Reports

March 1997

Natural Gas Analysis and Geographic Information Systems

(Explores how geographic information system techniques and methodologies are being used by the Energy Information Administration.)

April 1997

Natural Gas Pipeline and System Expansions

(Examines recent expansions to the North American natural gas

Natural Gas 1996: Highlights

(Reviews data for 1996 based on Energy Information Administration surveys.) pipeline network.)

July 1997

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

U.S. Natural gas Imports and Exports - 1996

(Contains final 1996 data on all U.S. imports and exports of natural gas.)

September 1997

U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed

(Examines recent and proposed expansions of underground natural gas storage capacity and deliverability in the United States as of September 1, 1997.)

October 1997

Comparison of Natural Gas Storage Estimates from the EIA and AGA

(Compares EIA and AGA estimates from January 1994 through July 1997.)

April 1998

Natural Gas 1997: A Preliminary Summary

(Reviews data for 1997 based on Energy Information Administration surveys.)

July 1998

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1998

U.S. Natural Gas Imports and Exports - 1997

(Contains final 1997 data on all U.S. imports and exports of natural gas.)

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1, 2, 3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202) 586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202) 586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Linda Cook (202) 586-6306
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202) 586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202) 586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quarterly Natural Gas Import and Export Sales and Price Report	Linda Cook (202) 586-6306
Producer Related Activities: Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119

Underground Storage:	9, 10, 11 12, 13, 14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption:				
Deliveries to:				
Residential,	15	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Commercial,	16		Natural Gas Purchases and Deliveries	(202) 586-4790
Industrial,	17		to Consumers"	
Electric Utility,	18		Form FERC-423, "Cost and Quality	
All Consumers	19		of Fuels for Electric Power Plants"	
Average Price to:				
City Gate,	20	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Residential,	21		Natural Gas Purchases and Deliveries	(202) 586-4790
Commercial,	22		to Consumers"	
Industrial,	23		Form FERC-423, "Cost and Quality	
Electric Utility	24		of Fuels for Electric Power Plants"	
Onsystem Sales	25	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
			Natural Gas Purchases and Deliveries	(202) 586-4790
			to Consumers"	
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric	Patricia Wells
			Administration	(202) 586-6077
Highlights				Mary Carlson
				(202) 586-4749

Appendix F

Natural Gas Electronic Products

In addition to printed publications, the Energy Information Administration distributes information concerning the natural gas industry in a variety of electronic formats through several media. Two main types of products are available electronically: *viewable documents* that may be read or printed; and *post-processable files* that may be directly used as input to a computer application without additional keying and checking of data.

Viewable documents represent complete or selected sections of publications including text, tables and graphs. They may be as specific as single tables or as general as an entire publication. Post-processable documents on the other hand are either macro-level rep-

resentations of information in published tables or micro-level respondent information representing responses on a specific nonconfidential survey.

The media used to distribute these electronic publications include: (1) The Energy Information Administration's Internet site (<http://www.eia.doe.gov> or <ftp://ftp.eia.doe.gov>); (2) Dial-in access through the Energy Information Administration's EPUB electronic bulletin board or through the Economic Bulletin Board of the Department of Commerce and the COGIS system; (3) The Energy Information Administration's quarterly CD-ROM(Info-Disk); (4) The Energy Information Administration's Fax on Demand System; and (5) diskettes.

	Internet	Dial-In	Infodisk	E-Mail	Diskette
ANNUAL PUBLICATIONS					
Natural Gas Annual, 1997 Provides information on supply and disposition of natural gas in the United States. Information is provided nationally, regionally, and by State for 1997.	V P		V P		P
Historical Natural Gas Annual, 1930 through 1997 Contains historical information about supply and disposition of natural gas at the national, regional, and State level, as well as prices at selected points in the flow of gas from wellhead to burnertip.	P		P		P
Natural Gas 1996: Issues and Trends Examines how industry restructuring continues to expand choices, and challenges, for industry, participants, and natural gas customers.	V		V		
Natural Gas 1995: Issues and Trends Addresses current issues affecting the natural gas industry and markets, and analyzes trends in the most recent natural gas data.	V		V		
Natural Gas 1994: Issues and Trends Provides an overview of the natural gas industry in 1993 and early 1994, focusing on the overall ability to deliver gas under the new regulatory mandates of the Federal Energy Regulatory Commission's Order 636.	V		V		
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report, 1996 1996 national and State estimates of reserves, reserve changes, and production, plus industry highlights.	V		V		

V = Viewable

P = Post-Processable

E = Automatic E-Mail Updates

	Internet	Dial-In	Infodisk	E-Mail	Diskette
Natural Gas Productive Capacity for the Lower 48 States 1986-1998 Analysis of monthly natural gas wellhead productive capacity.	V		V		
MONTHLY PUBLICATIONS					
Natural Gas Monthly, from the previous 12 months Entire Publication in viewable format.	V		V		
OTHER PUBLICATIONS					
Natural Gas Weekly Market Update Analysis of current price, supply and storage data along with a two week snapshot of the weather in four distinct metropolitan areas.	V				
Deliverability on the Interstate Natural Pipeline System This publication chronicles and analyzes pipeline growth from the perspective of the natural gas shipper and pipeline transporter.	V				
Natural Gas 1997: Preliminary Highlights This Special Focus, which was featured in the April 1998 issue of the <i>Natural Gas Monthly</i> , presents events that affected the natural gas industry during 1997.	V	P			
Energy Policy Act Transportation Study: Interim Report on Natural Gas Flow and Rates (EPACT) Analysis of natural gas transportation rates and distribution patterns for the period 1988 through 1994.	V		V		
Oil Production Capacity Extension Cost for the Persian Gulf Quantifies the cost of expanding oil production capacity for the Persian Gulf based on geologic plays and fields rather than country-level economics. Development costs and volumes are estimated for the next 15 years.	V		V		
Costs and Indices for Domestic Oil and Gas Fields Equipment and Production Operations 1993-1996 Cost of equipment and operation of oil and gas wells in the lower 48 States.	V		V		
Drilling Sideways- A Review of Horizontal Well Technology and the Domestic Application Salient aspects of current and near-future horizontal drilling and completion technology.	V		V		
International Oil and Gas Exploration and Development Compilation of country-level data and assessment of regional trends relating to upstream aspects of global oil and gas supply.	V		V		
Oil and Gas Field Code Master List Comprehensive listing of U.S. oil and gas field names as of October 1997.	V		V		
Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadjikistan, and Kyrgyzstan) Reservoir level assessments of oil and gas ultimate recovery in the former Soviet Union area.	V		V		

V = Viewable

P = Post-Processable

E = Automatic E-Mail Updates

	Internet	Dial-In	InfoDisk	E-Mail	Diskette
The Value of Underground Storage in Today's Natural Gas Industry. Explores the significant and changing role of storage in the industry.	V		V		
U.S. Oil and Gas Development in the Early 1900's Analyses of the growing prominence of smaller energy companies in U.S. oil and gas production	V		V		
ANNUAL DATA					
Natural Gas Supply and Disposition, by State 1997	V P	V P			
Natural Gas Summary, United States by Year 1990-1997	V P	V P			
Natural Gas Annual 1997 data Self-extracting file containing data (in comma-delimited format) that appear in the tables in the 1997 <i>Natural Gas Annual</i> .	P		P		P
Historical Natural Gas Annual 1997 data Self-extracting file containing historical information (in comma-delimited format) found in the tables in Volume 2 of the 1997 <i>Natural Gas Annual</i> . Annual historical data at the national level are presented for 1930-1997. Annual information by State and region is presented for 1967-1997.	P		P		P
1997 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for 1997.	P				P
1996 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for 1996.	P				P
Data archive of historical reserves estimates for U.S. Crude Oil, Natural Gas, and Natural Gas Liquids National, State, and State subregion data published in the reserves balance tables of <i>U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves</i> from 1977 forward.	P				P
MONTHLY DATA					
Natural Gas Production, United States by Month 1989-forward	P	P			
Natural Gas Supply and Disposition 1989-forward	P	P		E	
Natural Gas Imports and Exports 1989-forward	P	P			
Natural Gas Underground Storage: United States Total by Month 1989-forward	P	P		E	
Natural Gas Prices: United States Total by Month 1989-forward	P	P		E	
Natural Gas Consumption by Sector: United States Total by Month 1989-forward	P	P		E	
SELF-EXTRACTING COMPRESSED DATA FILE ARCHIVES					
Natural Gas Consumption and Prices, for most recent 2-3 years	P	P			
Natural Gas Consumption and Prices, for 1984-1995	P	P			

V = Viewable

P = Post-Processable

E = Automatic E-Mail Updates

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the temperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oil in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.